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# THE *Country* GUIDE

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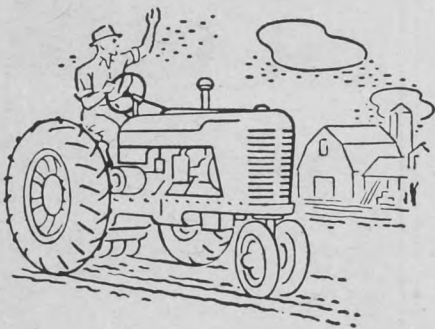




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The Guide offers the above as an explanation in case your copy is late in arriving this month. Harold Rogers, one of our composing room boys, tells an incredible story to his associate, Fred Ursel.

## THE Country GUIDE

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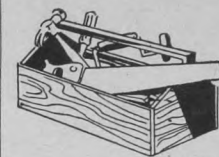
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## Building Ideas FOR THE Farm



PRACTICAL HINTS ON MATERIALS AND METHODS

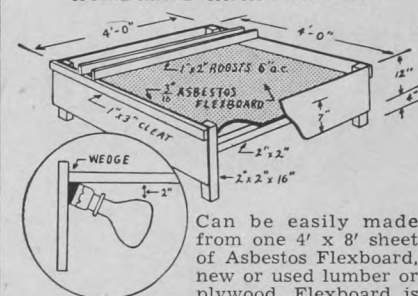
An ideal all-purpose interior and exterior building board for farm use should embody all of these qualities . . . fireproof, weatherproof, rotproof, ratproof, easy to handle, easy to work, flexible enough to apply to curved surfaces . . . and should never need painting! Johns-Manville makes a building board that has every one of those qualities. It is called Flexboard.

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### HOME-MADE CHICK BROODER



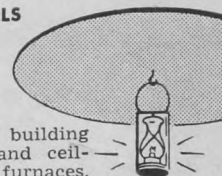
Can be easily made from one 4' x 8' sheet of Asbestos Flexboard, new or used lumber or plywood. Flexboard is recommended because it is fireproof. Use one 4' x 4' piece for top. Cut other piece into four 12" x 48" strips to cover sides.

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SEND FOR FREE BOOKLET — J-M Asbestos Flexboard has so many uses on the farm that we've prepared a 16-page illustrated booklet, "Flexboard for the Farm". It will help you solve many farm building problems, inside and outdoors. If your local dealer hasn't a copy, write direct to Canadian Johns-Manville, Dept. 780, 199 Bay St., Toronto.

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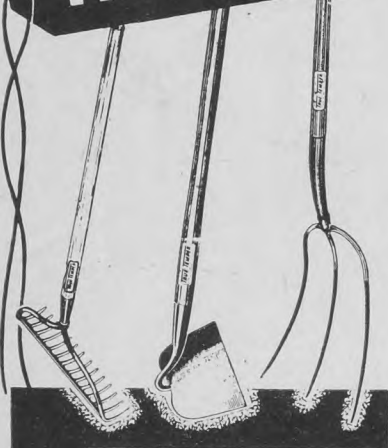
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## Under the Peace Tower

THE government has just about made up its mind not to have price controls. Maybe you are among those who think we should have price controls. But before you do, you might be interested in what I believe to be the government's reasoning, in what helped the administration make up its mind to keep clear of controls.

In the first place, nobody wants the prices frozen where they are now. The cost of living index has gone up from a norm of 100 in the 1935-1939 period to 179.7. If you call this 180, my figuring will be easier. Thus our dollar is now only 100-180th's of what it was, or 5/9ths, or roughly 55 cents. Today you have a 55-cent dollar.

Now then, it is apparent that if we do not want those prices to be frozen at these swollen levels—and they are today as swollen and as abnormal as were water levels at Winnipeg last spring—then obviously there must be a roll back.

If you have a roll back, then back goes the price of wheat, for instance. Can you imagine the holler from the wheat farmers? Back also goes the price of butter, and back goes the price of all farm produce!

Back too, goes the price of automobiles, and back goes the price of electric washers and stoves. Back go all the prices.

But if prices go back, then so do wages. Back go the wages of coal miners, of farm laborers, or brick layers. Back goes the wages of the city worker. Now I can speak authoritatively about the city man. He's groaning now. He can just make ends meet. How in the world can you clip ten per cent off his bank roll? I say that short of a dictatorship, it can't be done.

So we see at once, that price control would be impractical. Let's not labor this point, but certainly a price freeze, and a wage freeze, would bring us plenty of trouble.

Everybody is bellyaching about the cost of living. The only thing that saves this government along this line is this: that you can look to United States, to England, to Spain, or to Russia, and everywhere there is inflation. So the point is, there is no use kicking out St. Laurent to replace him with Drew; no sense bouncing the Liberals to get in the C.C.F. None of them can solve the cost of living. Nor are things better elsewhere. This has to be fought slowly, carefully. Inflation took six years to get this high; it may take six years for it to go back where it came from.

MEANWHILE, even if we could control our domestic production, how could we curb outside prices? From oil to oranges, from coal to cucumbers, we import a lot of stuff into Canada. The only way to keep prices down on these is to have subsidies. Our subsidy program during the war cost us a little under a billion dollars. It would cost more now. Suppose it would cost 200 millions a year. In the end, we, the taxpayers, would be taking the money out of one pocket and putting it in another. You cannot control inflation by robbing Peter to pay Paul.



Now suppose you do get controls. Who will obey them? Under the stirring impetus of war, most people will. Few today would oblige, just to keep Mr. Abbott pleased. There would be, of course, rationing in many things, priorities in others. There would be rackets in coupons, a wink at the gas station, money under the counter for automobile accessories, and in the end, a real black market.

To try and stop it, we'd have costly lawyers, expenses of courts. Prosecutions, prosecutions. Who wants to send a man to jail for getting extra meat in a black market, for his kiddies who need it? Who wants to tell a farmer he cannot use his own butter? Yet I remember a western Ontario editor trying to get the drop on a farmer, because at his own table, on Sundays, this farmer gave guests all the butter they needed. The editor was sore at the rationing board for failure to give him a B\* permit for gasoline. So it goes.

Then there will be the spies and sneaks and snoopers, who will be stooging on you, tattle-telling. Controllers of this and that will become little czars, pandering to favorites, persecuting foes.

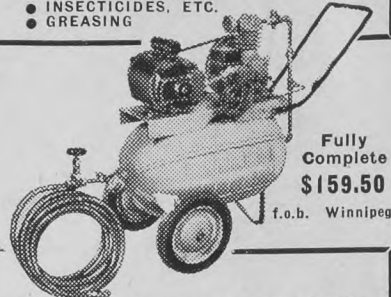
Those who like to keep the lawyers busy will thus be doing so. The taxes will be devoted to supporting these rationing laws, and you will be paying the shot so that these lawyers can prosecute your neighbor, or maybe yourself. Is this what you want?

Controls were a flop in the States; they are relaxing them. Some think the Americans made horses haunches of themselves in invoking controls too soon, and needlessly.

Actually, we are beginning to curb inflation. Income taxes take some. Higher down payments help a bit. Merchandising curbs and other restrictions slow down the buyers. This is bitter medicine. We do not like it. But the truth is this: the reason you pay so much for your car is that there are more customers than cars. The government says that controls won't work; not right now, anyway.

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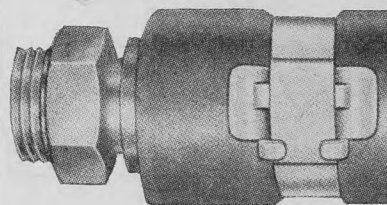
Gives you gas station air pressure right on your own farm! Compressor made by Quincy—dependable long service. Piston type, size 2"x1 3/4". Capacity 2.8 C.F.M. at 100 lbs. pressure. Westinghouse 1/3 H.P. 110-220 volt heavy duty motor. Tank—ten gallon air storage capacity. Stainless steel construction. Tested—400 lbs. pressure. Automatic pressure switch. It's the unit that every farmer can afford and should have. Strongly made. Nicely finished and built for service. Order yours now or write for full particulars.

Model ACW complete as illustrated only **\$159.50**

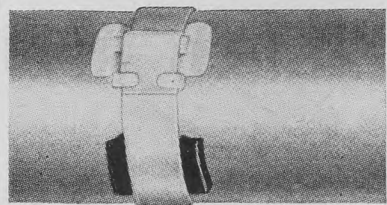
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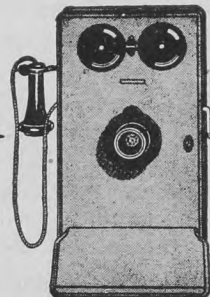


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## Science on the Farm

*A few of the directions from which science influences agriculture*

A GROUP of U.S. government agencies have begun a 13-months' survey of the evaporation of water. In large countries, such as the United States and Canada, billions of gallons of water are drawn into the atmosphere each year by evaporation. This water comes from the nation's reservoirs, its lakes and rivers, as well as from the soil and growing plants. What the American team is concerned with is the relation of evaporation to the planning of future water resources development, especially in the western states, where irrigation and other water conservation methods are so important. It is proposed to use a saucer-shaped lake, outside Oklahoma City, not only because the lake is several miles in diameter, but because its red, Oklahoma-clay bottom is virtually water-tight, so that every gallon of water going in or out can be accurately measured.

RADIOACTIVE sulphur has been used at the University of California to provide the first experimental demonstration that leaves affected with rust and mildew, and treated with sulphur, actually absorb the sulphur. Leaves treated with radioactive sulphur were placed next to an X-ray film for two days. As a result the radioactive sulphur concentrated in the fungus colonies within the leaves and showed up as an exposure on the film. Farmers have often used sulphur to fight fungus diseases, but this was the first time it has been proved that the chemical has a tendency to concentrate in the rusted and mildewed areas of the leaves.

SCIENTISTS are now working on chemicals to kill insects by making the plants poisonous, without rendering them unsafe for human consumption. Such poisons would take care of insects, such as aphids, which suck the juices of plants. Curiously, the poisonous chemicals under experimentation come from inert calcium phosphate rock. These chemicals are said to enter all parts of the plant through the sap, so that no matter where the insect may be, it will be killed if it sucks any of the juice. It is thought possible to apply the chemical through the soil, on seeds, or by sprays and dusts on the foliage.

PARATHION, an insecticide now used on fields and orchards, is in reality a nerve gas. Gas masks should always be worn when applying it. If too much of this gas is inhaled, or absorbed through the skin, symptoms develop which progressively take the form of muscle-twitching, difficult breathing, watering at the nose and mouth, gasping, diarrhea, convulsions, unconsciousness and death. More than a dozen individuals have died during the past two years, and some this year, according to the U.S. Food and Drug Administration. Parathion kills mites, moths, aphids, army worms, corn borers, corn-ear worms, thrips, red spiders, grasshoppers, potato beetles and other insect pests. Moreover, it would require extremely heavy doses before the residue of parathion on fruit and vegetables reaching the market could prove dangerous to consumers.

SUBTILIN is another new bacterially produced antibiotic. It is capable of killing botulinus, described as potentially the most lethal of food-poisoning organisms. Minute quantities of subtilin added to canned foods make it possible to sterilize these foods effectively, even with a mild heat treatment lasting no more than five to ten minutes, as compared with 30 to 60 minutes of cooking now given food products in order to destroy botulinus and other food-spoiling organisms. The new microbe killer has been successfully tried on many vegetables, including broccoli, cauliflower and Brussels sprouts, which ordinarily become so mushy and unattractive under long cooking that they cannot be successfully canned. Subtilin is credited with being effective against all spore-forming and heat-resistant bacteria, or other organisms known to occur in food products; to keep its killing power better in the presence of heat than most other known antibiotics; to be destroyed by the enzymes in the human digestive tract and, therefore, unlikely to accumulate in the body; and to be non-toxic in the digestive system, judged by extensive tests with rats and limited tests with human patients.

CANCER in plants appears to be started by some chemical or physical factor which acts like a trigger. What happens after this trigger-action takes place depends on the "gun" and the "way it is loaded," or in other words, on the plant and the way it is fed. After studying 100,000 pieces of plant tissue, two Wisconsin scientists found that the substances in the soil which furnish nutrition to plants either speed up or slow down disease growth, depending on the proportions of the various nutrients present. It is hoped that the study of plant cancer may result in the key to human cancer.

PAMAKANI is a shrub which is a pest of the Hawaiian Islands. It destroys large areas of grazing land. Now, a tiny Mexican fly, less than a quarter of an inch in size with wings spread, called the stem gall fly, seems likely to kill off the pamakani by planting its eggs in the stem of the shrub, the larvae from them attacking the stem of the plant. It was previously impossible to ride through one 65,000-acre ranch on horseback, but now "there is not one pamakani plant on the whole 65,000-acre ranch that has not been affected."

FOR a long time man has been trying to find the answer to the question as to how plants are able to manufacture their food. Some doctors in the Washington University Medical School have used radioactive carbon 14 to trace the path of different parts of food compounds given to photosynthetic bacteria. They have found that what happens to this food differs according to whether the bacteria are fed in a dark or in a light room. It is reported that during hours of darkness, bacteria seem to be able to build carbon into their bodies in the form called carbonate, by chemists. When it is light, carbon is assimilated more directly into more complex compounds.

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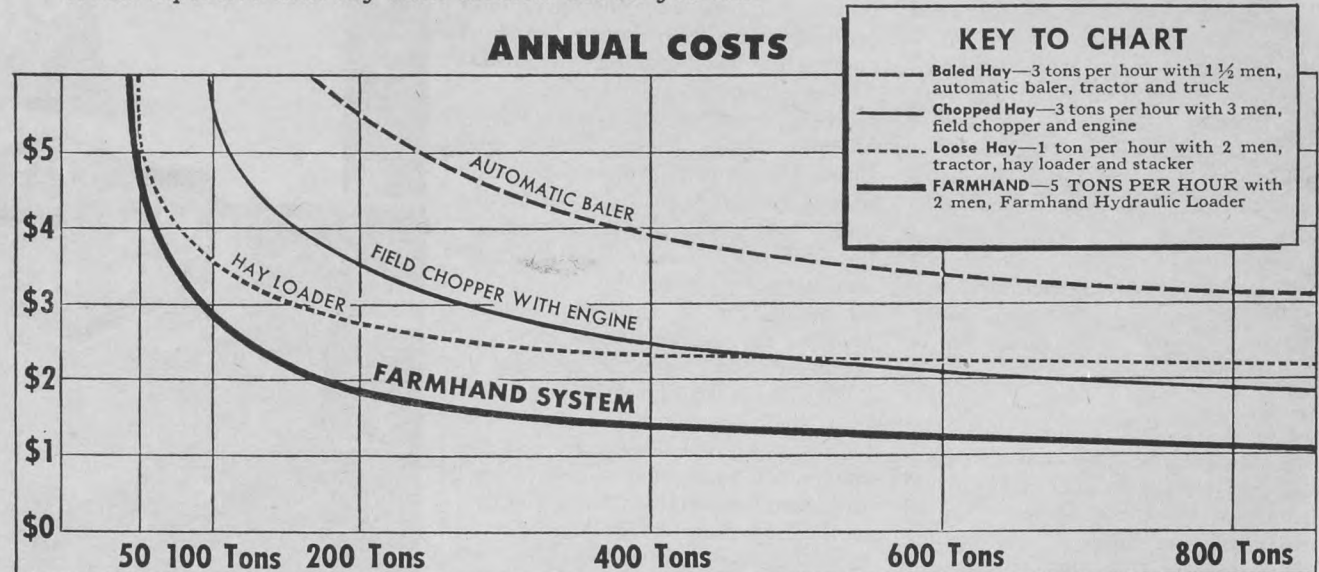
**WILLARD STORAGE BATTERY CO. OF CANADA, LTD., TORONTO, ONTARIO**



# Here's proof: FARMHAND HAYING costs far less than ANY other method!



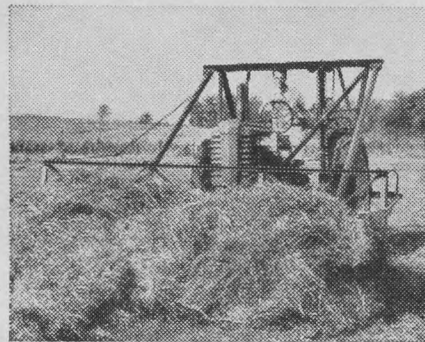
**SPECIAL STUDY** of hay harvest costs by university extension specialist in farm management reveals relative costs of haying systems—adds to evidence that FARMHAND Haying System is less expensive than any other method. See for yourself!



## 1. HAY HARVEST COSTS FARMHAND SYSTEM

Windrow to field stack

ANNUAL:	Per ton
50 tons.....	\$2.41
100 tons.....	\$1.49
200 tons.....	\$1.02
400 tons.....	\$0.80
600 tons.....	\$0.72
800 tons.....	\$0.67



**BUCK WINDROWS** up to 15 m.p.h. with your FARMHAND Hydraulic Loader and high-capacity Hay Basket attachment. Clears up to 50 acres a day. Handles a full half-ton to the load.



**CARRY HAY** direct to field stack as fast as you want to move your tractor. No needless loading and unloading. FARMHAND gives you maneuverability of man with a fork! Self-leveling basket cradles load.

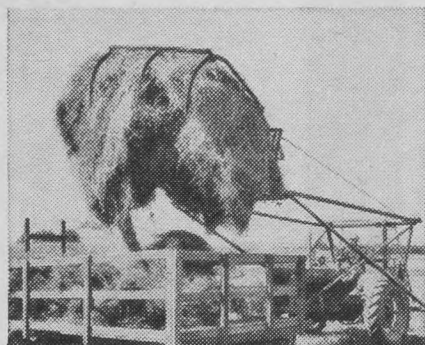


**STACK HAY** up to 27 feet with your Heavy-Duty FARMHAND Loader and Hydraulic Push-Off on Hay Basket. Lifts half-ton of hay in 30 seconds... builds solid stacks for minimum weathering loss.

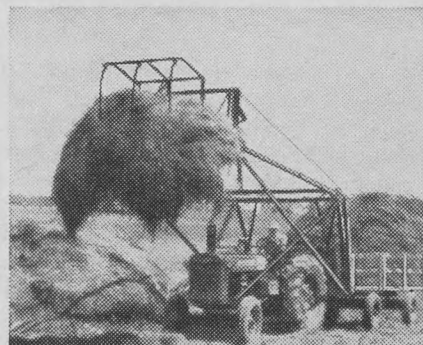
## 2. HAY HARVEST COSTS FARMHAND SYSTEM

Field stack to wagon to yard stack or to animals (up to 1 mile haul)

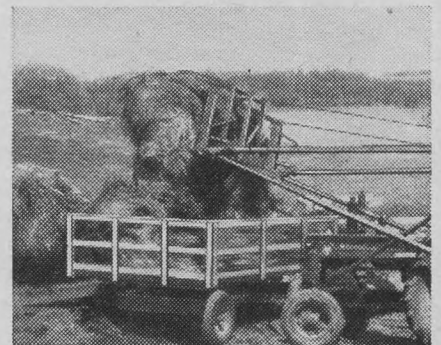
ANNUAL:	Per ton
50 tons.....	\$2.54
100 tons.....	\$1.43
200 tons.....	\$0.86
400 tons.....	\$0.59
600 tons.....	\$0.50
800 tons.....	\$0.45



**LOAD HAY** into wagon for transport with maximum speed and ease! FARMHAND Loader with Grapple Fork grabs huge loads, places them accurately in wagon with flexibility of human hand!



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## 3. TOTAL COSTS FARMHAND SYSTEM

Windrow to field stack—field stack to wagon to yard stack or to animals (up to 1 mile haul)

ANNUAL:	Per ton
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100 tons.....	\$2.92
200 tons.....	\$1.88
400 tons.....	\$1.39
600 tons.....	\$1.22
800 tons.....	\$1.12

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FARMHAND DIVISION, SUPERIOR SEPARATOR COMPANY of Canada, Ltd., St. Boniface, Manitoba

☐ HAY HARVEST COSTS BULLETIN

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☐ Name of my nearest FARMHAND Dealer.

Name.....

Address.....

Town..... Province.....



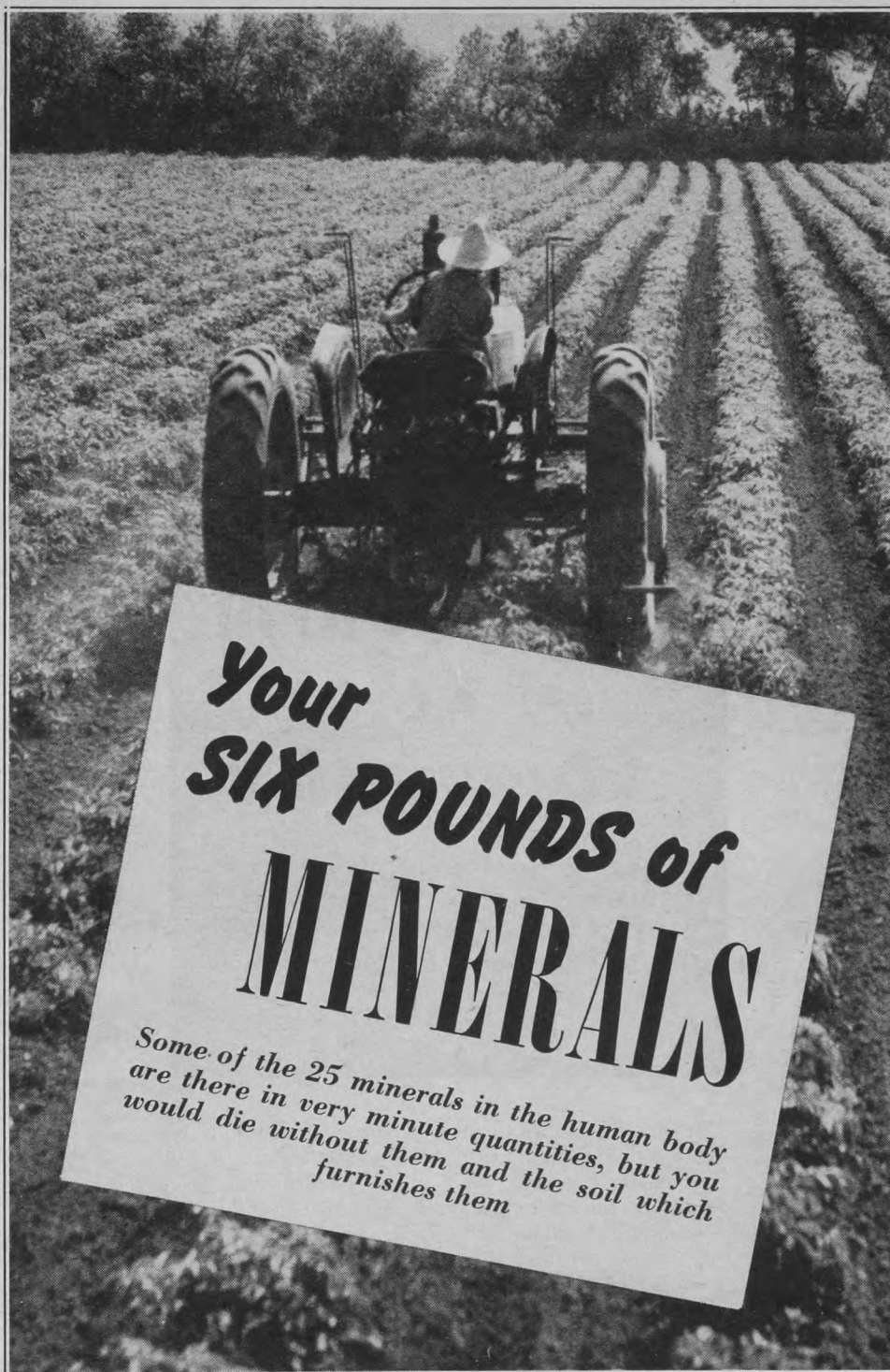
**"P** RIMITIVE man stayed along the seashore," said Dr. William A. Albrecht recently. "He stayed in regions of moderate rainfall because, in less weathered soils he had the means of good nutrition. He and his plow followed the cow. She was the assaying agent, and selected the quality of the nutrition for herself and for him, according to the plants, according to the microbes and according to the fertility of the soil. Modern man, however, with his technological helps, reversed the process. He put the cow behind the wagon, his whip on the horses, and dragged the cow along. Of her own choice, or her assay of the soil fertility, she might never have gone in that direction. By the reversal of that procedure, this matter of nutrition became a handicap, where formerly . . . it was an asset."

Dr. Albrecht is an eminent soil specialist in the State of Missouri, where he is Chairman of the Soils Department in the College of Agriculture of the State University. Dr. Albrecht, of course, knows perfectly well that man doesn't follow cows when he moves to a new country, or a new area; or if he does, it is in order to drive them to the place he wants to go. This was as true in Biblical times as now. Why then, other than for effect, as it is used here, would he take advantage of such a figure of speech?

The answer to this question, if we can find it, will involve a great many other questions of vital interest to both producers and consumers of food. Some of these questions are to be found in the next paragraph.

Why is it that there are now so many food fads and fancies which involve vitamin pills, controversies over whole-wheat versus brown versus white bread, the use of vegetable juices, yogurt, blackstrap molasses, and perhaps many others? Why do we have so much soil erosion, and is it true as Dr. Albrecht also said, that soil does not erode until it is weakened, sick or dead? How can we account for the apparent increase in the number of pests and diseases which seem to infest and infect our crops? What is responsible for the fact that prairie farmers, who only a few years ago used almost no commercial fertilizers, now buy thousands of tons each year? Why are doctors beginning to find out that certain types of sickness seem to be characteristic of certain districts? Why is it that mastitis in dairy cattle is frequently referred to as the No. 1 problem with this class of livestock? Why should it be necessary for the government of any prairie province to put on a vigorous campaign for calfhood vaccination of cattle against Brucellosis or Bang's disease? Why, among the 18 million young men examined for the armed forces during World War II, did the men from Kansas rate first for the proportion of Grade A men examined? Why is the sterility in cattle such a problem in some areas? And how is it that litters of pigs are sometimes born hairless, or that human beings and calves develop goitres?

**I** DENTICAL answers cannot be given to all these questions, but one common denominator links all of them together—soil. Having said this, one is almost sure to run afoul of what really amounts to three schools of thought and a prejudice. By a prejudice is meant what was once described as "a vagrant opinion without visible means of support," or an opinion unsupported by fact; and by a school of thought is meant an opinion or set of opinions



held by a substantial number of people, supported by a fair amount of evidence.

The person who says that wherever you can grow spuds, or wheat, or beef, or any other crop, these are good foods, is prejudiced, because it just isn't true. The evidence is accumulating heavily against such a view. The three schools of thought are perhaps better described as two schools of thought and a compromise between them. One school believes in the virtues of chemical plant food (commercial fertilizers), while the other believes that the use of chemicals is bad practice because it helps to destroy the balance of nature. These people hold that organic manures alone will keep the soil in good heart and yield plants and livestock able to

by D. W. NASH

withstand the attacks of pests and diseases, if indeed there are such attacks. The third group, the compromisers, admit the value of humus which is made from decayed vegetable materials, but believe that there is also a place for the chemical fertilizers. The two divergent views attack the problem from two widely different points of view; one from the importance of minerals or inert matter as plant food, and the other from the biological and organic point of view.

This article will be concerned, without prejudice, with the minerals, because there are certain facts which are gradually accumulating from the work of soil, animal and plant scientists, regardless of

which divergent views may be fundamentally the sounder. The six pounds of minerals in your body are very important.

Every farmer who has used commercial fertilizers and many who have not, realize that the three most important elements used as food by plants are nitrogen, phosphorus and potassium. The well-known 11-48-0 fertilizer formula, as well as all other such fertilizer formulae illustrate this. It means 11 per cent nitrogen, 48 per cent available phosphoric acid and no potash. The figures may differ, but the order of the materials listed is the same in all such formulae.

**B**ROADLY speaking, nitrogen makes for vigorous growth, phosphorus for reproduction (seeds) and potassium for carbohydrates, or sturdiness of growth. But the human body could not exist with only these three elements in generous supply. Twenty-five minerals in all are found in the human body, but it is not known how essential each of them is. Certain so-called "trace" minerals, are essential, but only in very minute quantities. These seem to pair up the vitamins. Thus, cobalt is associated with Vitamin B12, the lack of them producing pernicious anemia. Copper is essential if the amount of iron we get is to be fully available. Both copper and iron also seem to be essential for the prevention of anemia, since cobalt, copper and iron are all necessary if a normal red blood cell count is to be maintained in the animal body. Zinc is important as a constituent of several body enzymes, and is an important part of insulin, as well as being essential if soils are to provide the most favorable amounts of vitamin G or B2. Boron, another vital "trace" mineral appears to

keep vitamin C from disappearing by oxidation, and is also thought to be interdependent with calcium, which, according to the United States Department of Agriculture, is one of the four major deficiencies in the American diet. Soils in the eastern half of the continent are usually deficient in calcium; and nearly all of it carried in human food is used for the formation of bones and teeth. Magnesium is necessary for the most healthful condition of the nerves and muscles, and for making some of the enzymes of the body work. When it is deficient, kidneys may be damaged, the heart action made more rapid, the nerves irritated, and the circulatory system of the body damaged. Manganese enables the plant to produce maximum amounts of vitamin C, and in the human body it is important because it helps utilize vitamin B1. It is believed essential to growth, reproduction and lactation. Sulphur is a part of insulin, and without sufficient of it in our food, we are not able to utilize carbohydrates or starchy foodstuffs to advantage. In nature, also, sulphur is found in vitamin B1, and is a component of proteins. It is also found in the brain and nerve tissue.

**M**UCH of the information available today about these "trace" minerals and their importance in the lives of plants and animals appeared only during the past 25 years or less. Our problem, both as producers and consumers is to use this information to advantage for the production and consumption of good healthful food. Wheat and livestock are our main crops in the prairie provinces, while in British Columbia and in the remainder of Canada farm production is much more diverse.

Soil losses, mineral deficiencies, and inefficient land use, occur (Please turn to page 35)





*This field on the Foster farm at Abernethy, Sask., has been in continuous crop and fallow since 1886.*

THE farming area around Abernethy, Saskatchewan, today, is one of the older, better, more substantial and more conservative areas of the province. In the early days grain had to be hauled to Indian Head. Six loads per week meant six days lasting from 4 a.m. until 9 p.m. By my road map, this is a distance of about 25 miles. It was the home of the late Hon. W. R. Motherwell, for a long time Minister of Agriculture for Canada, who, if my memory serves me rightly, homesteaded at Abernethy in 1882.

It was the homesteaders of this early Indian Head territory who, in 1901, determined to safeguard and protect their rights by the formation of the Territorial Grain Growers' Association. At Sintaluta, too, only two stations east of Indian Head, lived E. A. Partridge, the stormy petrel of the early days of co-operative grain marketing, who was not only a vigorous organizer of the old Grain Growers' Grain Company, but the first editor of *The Grain Growers' Guide*.

These older days are proud days in the family of William Foster, who farms two and a half miles north of Abernethy. Mr. Foster's father homesteaded on the same farm in 1885 and, when I visited it, I saw a field just south of the buildings, which has been in continuous cultivation since 1886 when the first crop on the homestead was seeded. In the intervening 65 years, much that was unexpected has happened, but the field, as does the rest of the farm, gives a disappointing performance if it does not still produce a 30-bushel crop. True, the cropping system now is on a straight wheat-fallow basis, whereas it used to be wheat-wheat-fallow; and true, also, that commercial fertilizers are now used, whereas formerly they were unknown. Mr. Foster told me, however, that despite the 65 years of cultivation, and with the aid of commercial fertilizer, yields are increasing, if anything, rather than decreasing.

It seems to me it is a good thing for Canada when a man can farm the land his father farmed. I believe it to be a good thing for agriculture and for the farm. I do not think this is pure sentiment, though, in my own case it may be, where members of my family, though not now closely related, are still farming the Ontario acres first settled in 1805, by my great-great grandfather.

I found my visit to the Foster farm of great interest, for several reasons. One was because of

## The Foster Farm at Abernethy

*Land cropped and fallowed continuously for 65 years still yields well, but the farm has witnessed many changes in this period*

by H. S. FRY

Mr. Foster's ability to combine successful farming with off-the-farm activity. Another was because of the changes he has made in the farm economy since he took over the farm, then five quarter-sections, more than 20 years ago. Finally, it was of interest because this farm is one of a growing number developing closer associations with village and town life, even to the extent, as in this instance, of moving off the farm for the winter months.

THE farm today consists of six quarters, of which about 800 acres are cultivated. It is a good strong soil and generally doesn't lack moisture. There is not much soil drifting, perhaps because the straw is generally worked into the ground and provides enough organic matter to hold the soil together. The fair moisture conditions usually experienced, would help by hastening the decomposition of the straw.

Mr. Foster uses circular harrows to spread the straw from the combine, getting a 10 to 12-foot spread from a 16-foot cut. He uses the disker two or three times during the season and one field had the disker twice and the circular harrow once. He thought, perhaps, it would require another going over with the duckfoot cultivator, and the rod weeder by fall.

This is a farm which has changed over in less than 20 years from one which carried up to 100 head of cattle, to a straight wheat-fallow rotation and no cattle at all. Machinery has displaced all the horses except three. This certainly makes for easier farming, for less labor and hired help; and it does, as Mr. Foster dryly remarked, provide for curling and living in town. More important, no doubt, is the fact that it makes it easier for the children to attend school. On the edge of the Foster farm is a small school known as the Foster School. It has, I understand, only four or five pupils, but none who are of the same age as the Foster children. It seemed right to the Fosters, that their children should be able to go to school with, and to play as well as learn in the company of children of their

*W. H. Foster and young son demonstrate the garden tractor, with mower attachment.*

own age. Under this system of farming, which Mr. Foster believes best in the end, there is nothing to keep the family on the farm, so why not spend the winter in town to the benefit of the whole family? No doubt this practice is an innovation, and marks something in the nature of a revolution in long-established farm living. But this is something for the rural sociologists and agricultural economists to ponder, while Mr. and Mrs. Foster and others like them, do what they believe is best under their circumstances.

As readers may suspect, there is no larger school unit in the Abernethy area. Since one of the prime objectives of the larger unit is to equalize educational opportunity through the equalization of cost, it is true in this area, as in some others where the assessment is high, that there has been no eagerness on the part of the taxpayers to share the burden of cost. The little Foster School, with its four or five pupils would seem to offer mute testimony to a need for something different,



*The Foster farmhouse (above) built in 1898, must now share the family living with the new town house (below) built in 1949.*

but what it is must be left for the people of the area to work out.

MR. FOSTER is very active in local agricultural and co-operative affairs. He is chairman of the local Agricultural Conservation and Improvement Board, and is also chairman of the District Board, but neither of these boards, I understand, has been particularly active. At Abernethy, one of the few really active agricultural societies in the province is located, of which Mr. Foster was vice-president at the time of my visit. This society, which handles all competitions in the district, such as the standing field crops and the summerfallow competitions, as well as conducting the annual fair, is believed to fill a real need, and there has been some reluctance to develop the conservation and improvement board idea, for fear of destroying an existing good organization in order to make way for a new one. There are, of course, other things that could be done by the Board, such as the development of land use studies now under way in some municipalities of Saskatchewan, but these things cannot be done by a very few people. The week I was there Mr. Foster had two meetings and the previous week there were three. He had also been a director for 15 years of the local co-operative (Please turn to page 32)





A TRAVELLER from, say, Lethbridge to Winnipeg, doesn't have to be very observant to notice the gradual change in the character of the summerfallowing practices he encounters on his journey. At its outset most every fallow will be strewn with stubble, broken and messed about, to be sure, but almost as abundant as the day the combine passed over that particular field. At the Manitoba end of his journey most of the fallows will be as clean and black as the style of good farming required forty years ago.

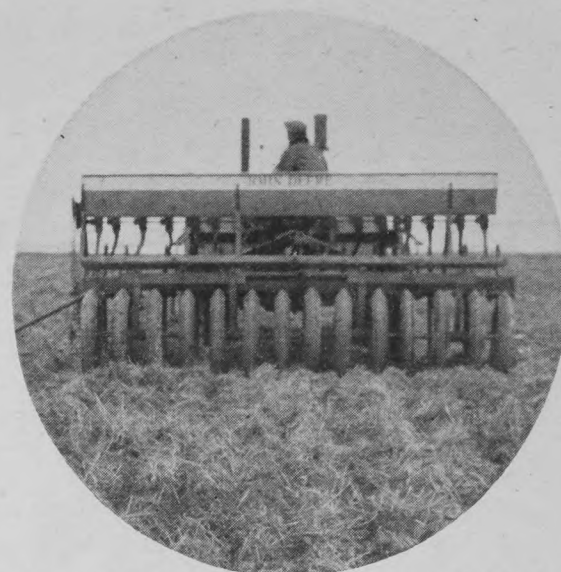
The differences can be accounted for in this way. The terrific losses caused by soil drifting in the dry belt before the war taught its farmers the necessity of straw mulches to protect plowed land from erosion. As one moves east into areas of heavier rainfall and heavier soil, weed growth becomes the Number One problem. Fallow methods which leave the largest amount of protective trash on top are not the ones best calculated to deal with troublesome weeds, and Red River farmers consequently come out with a different answer, but this writer's guess would be that stubble mulch farming is being more intensively practiced in the dry belt year by year, and that it is spreading further east.

The theory underlying stubble mulch farming, or trash cover farming, as it is sometimes called, is simple. In a state of nature land does not erode. A forest floor of leaves, or open ground covered by matted grass and tough sod, absorbs water rapidly, which keeps it from washing out, and its soil particles are protected from the sweep of the wind. Even a well-established standing crop affords a fair amount of protection against erosion. After the crop is removed, a good stand of stubble continues to protect the ground. As and when the stubble is

It works on the principle of a revolving square-edged rod moving forward under, but close to, the surface of the ground. It sprang into high favor almost immediately on certain types of soils because it does a good job of weed killing with a minimum disturbance of the trash. But it has some handicaps. It is not suited to stony ground and its usefulness diminishes as the ground gets hard and dry. In such fields it must be preceded by some other deep working implement to get good results.

THE one-way disk made its appearance in the early '20's and perhaps no other tillage implement is so versatile or has been more widely adopted. From the standpoint of the trash farmer trying to protect the land from soil drifting, the one-way has a decided place. One stroke with a one-way, especially if it is not set at too wide an angle, nor drawn at speeds in excess of three miles per hour, will do a good initial job on a summerfallow without disturbing the stubble too much. A second stroke with a one-way, however, begins to bury trash more than stubble mulch farmers like. The Nebraska Experiment Station, which has made perhaps the most thorough study of stubble mulch preservation, declares that because of the amount of stubble buried by the one-way disk, other tools should be used for second and subsequent operations. Our own Lethbridge Station allows not more than one stroke with a one-way on light binder stubble, but suggests that a second may be necessary in a thick stand of combine stubble to facilitate seeding operations.

In the early '20's C. S. Noble, of Nobleford, Alberta, began experimenting with a tool to which he gave the name the "blade," but which has since been called a variety of other names such as blade cultivator, sub-surface tiller, or sub-tiller, as it does the work of tillage under the surface. The first blades were flat bars of heavy steel six or seven inches wide, and about five feet long with one of its sides drawn to a fine



*A type of drill which is becoming popular in the trash farming country.*

cutting edge. Very heavily mounted, these cut under the surface at right angles to the direction of travel.

Later blades were dished. Mr. Noble tried them with the concave side up, and with the convex side up. Theoretically if the concave side is up the machine keeps itself sharp automatically. If the convex side is up the soil passing over the bar is broken up more finely.

Subsequent experimentation has produced bars up to 12 feet in length, and a variety of V-shaped blades cutting from 15 inches to eight feet in width, and travelling in gangs to utilize the full power of large tractors. Besides these differences in size and design, blades are now manufactured with different pitches, the steeper blades being better adopted to shallow cultivation for weed destruction.

The value of the blade implement for use in trash cover farming was (Please turn to page 42)

# Trash Cover Fallows

*New implements and new practices  
transform dry land fallows*

by PETER MACDONALD

*Right, above: A blade cultivator doing a normal job in heavy combine stubble.*

*Right, below: Blade cultivators may be used for breaking sod. This one is working in sod with many clumps of sage brush in Washington state.*

worked into the land the risk of erosion by both wind and water increases.

Following this reasoning, the dry land farmer must adopt some tillage method which will do the job required of a fallow; that is to say, kill weeds, conserve moisture, and store up plant food, with the least possible disturbance of the stubble and other trash on the surface. This means a complete abandonment of the plow-disk-harrow combination which the early settlers took west with them. It calls for new methods and new implements.

At the close of the first war Albertans began to make the acquaintance of the rod weeder, an implement which seems to have come in from Montana.







Between Johnny's eyrie and the 15th floor there was nothing but a maze of open steel and rough planks.

IN three hours Socko George Andrews, local boy, would enter the ring with Torpedo Ames, former—very much former—welter-weight champion. Tumult and shouting would accompany the foreordained triumph of Socko George Andrews. Johnny Chambers had a ticket for a ringside seat.

Meanwhile, dusk fell swiftly, with a blizzard forecast by the weather bureau. Johnny stood on a narrow steel girder 28 stories above the ground and waited for the hoist to come up to put him down on solid earth again. It was cold up there. This was the bare, stark framework two levels from the top of what would some day be an office building. There was no shelter of any sort. Far below, the streets showed sharp-edged paths of black, which were traffic lanes, between banks of snow the street-cleaning department had not yet removed.

Johnny hunched his coat collar closer about his throat. All about him were the gaunt I-beams of the building's skeleton. There was no relief anywhere from the naked angularity of structural steel, unless you counted the derrick scaffold two levels higher. Even the ladders normally used by steel men for climbing to their work were missing. A barge load of stair material had sunk down-river some weeks back, and the steel stairs were 14 floors behind the frame instead of the usual four or five. And the steel men considered 14 floors too far to climb by ladder, so an amiable campaign of ladder sabotage had driven the erection superintendent to frenzied profanity and final surrender. The recently raised hoist head, now, went all the way to the top of the riveted steel, and now the steel men rode the hoist blandly to and from their work, in defiance of normal safety regulations.

But the building was not mere skeleton all the way to earth. A certain distance from the top there was a temporary floor of two-inch planking, to catch stray objects—or men—which might fall from the working level. Some 14 or 15 stories down there were the concrete floors. But the goulashers were late on the concrete work, too, because of bad weather and chiseling on form lumber. Still lower there were wall panels of brick, and the lowest levels of all were completely walled in and even had windows. But between Johnny's eyrie and the 15th floor, there was nothing but a maze of open steel and the rough planks of the temporary flooring.

THE cables of the hoist were still. Four men had gone down on the last trip. Johnny was left, and Mike Giskra, who was merely a helper, and at the moment had a badly burned and bandaged hand. But Mike, being both a Hunkie and a helper, was not to be treated as more than vaguely human, in Johnny's view. He wasn't company. The greased wire cables swayed from the hoist block. They ran a long, long way down. If your eyes followed them, you'd notice a sort of hypnotic effect. They dwindled startlingly and writhed with a surprisingly complicated motion among themselves. Johnny noted it, but without interest. He waited for the hoist to come up for him.

The dusk deepened. Nothing happened. Lights began to flick on in hotels and apartment

He waited on the same narrow girder, 28 stories above the ground. There was no use trying to hurry up the electrician on the hoist. Electricians were temperamental guys, always arguing about something. The last load to go down had nearly yanked the signal bell from its fastenings, calling down for service. Maybe he was still arguing about that, and making Johnny wait just out of peevishness.

The cables swayed. Presently the wind moaned in the grill of girders that reached upward toward the sky. Johnny felt the presence of the ticket in his hip pocket as a small boy will feel a new jack-knife even when it is unused and unopened during school hours. A little stream of sparks moved somewhere. Johnny identified it as a passenger train, crawling across a bridge into town. On the river-side parkway he was able to see the headlights of cars. It was still merely deep dusk, up here, but on the ground it was night. Mike Giskra looked uncomfortable. Johnny felt expansive because of what he would see Socko George Andrews accomplish this night. He unbent so far as to offer Mike—a mere punk—a cigarette.

"Takin' their time," he observed, referring to the hoist.

"Yeah," said Mike. He lighted the cigarette clumsily. "Plenty cold, hey?"

Johnny's mind went back to the coming fight. Columns of strictly local expert dope were stored away in his mind. He was quite unconscious of himself as one of two tiny human figures on a narrow girder, high above earth. Time, though, began to pass slowly. It was cold. The wind moaned again. The deep dusk grew deeper yet.

"Say!" said Johnny. "What the hell's the matter with the guy at the hoist motor? Is he crazy? I can't wait all night! I'm goin' someplace!"

"Yeah," said Mike ruefully. "Twice I t'ink I hear those cables move, but they ain't. He's late. It gets dark, too." He added worriedly: "Johnny, if he don't come I'm one damn' bad fix with my hand an' the ice down below."

"Forget it," said Johnny. "The hoist'll come." He yawned elaborately. "I'm goin' to sit down an' wait till he gets ready to send the hoist back. Must be arguin' about something."

He walked unconcernedly—with all empty space below him—back to the nearest column. He sat down on the girder with the column for a back rest and his feet dangling over nothingness. He was definitely chilly, now. . . . And the hoist didn't come up.

Then there were obscure vibrations in the girder on which he sat.

"Hey, Mike," he called hopefully. "Hoist runnin'?"

"It's me," said Mike unhappily off in the darkness. "I'm goin' to sit down too. He's one damn' funny guy, that guy at the hoist."

Silence. The wind moaned again, thrumming through the empty web of I-beams. Johnny felt at his hip pocket, where his wallet was. It wouldn't do to lose that ticket. But he ought to be down on the ground now. There must be something wrong with the hoist motor.

Johnny's brow wrinkled. The wind blew in icy puffs already, and presently it would be savage.

Then Johnny happened to notice that to northward, the city lights were blurred. A mist was in the act of enveloping them—a mist which they illuminated as they were swallowed up. The mist engulfed new lights as Johnny watched it, and squeezed other lights behind it to extinction.

Mike sputtered furiously.

"You see that snow, Johnny? That's the blizzard that's comin'! They leave me here to freeze! By golly, I kill somebody for this!"

Johnny stood up. Electricians liked to argue. He didn't. But enough was enough. He made his way over to the signal wire—a thin steel strand that dropped clear to a strident bell beside the motor at ground level. Johnny grabbed the wire and yanked angrily on it. No missing that signal. Then he stood still, foolishly, while a funny feeling went all over him. The wire hung slack. It had broken. Steel as it was, somehow it had parted in the middle of the signaling that the last down-load of men had used it for.

So there wasn't anything wrong with the motor. The hoist simply wasn't (Please turn to page 49)

# High Spot

by WILL F. JENKINS

**Johnny Chambers, veteran steel man, had a ringside ticket for the fight but found himself marooned with his helper on a girder 28 stories up, with signals dead and a sleet storm blowing**

Illustrated by Tom Simpkins

houses. Johnny fumbled out a cigarette. He lighted it, shielding the match with the expertness of a steel man. The wind was cold. It seemed to have the smell of snow in it. So far, it bore out the weather-bureau prediction of a blizzard in the offing. Street lights began to appear down in the city. Johnny saw them come on in huge, rectangular areas, one section of the city after another. The hoist still didn't move.

Mike Giskra blew on the fingers of his unscorched hand and shuffled his feet. Johnny glanced at him. Mike grinned bashfully and said "Plenty cold, hey?"



# The Cypress Hills Massacre

*The tale of Eashappie, an eye witness as a boy, as told through Ochankuga'he, adds something to the conflicting but dramatic tale of the bloodiest encounter in Canada since confederation*

by P. M. ABEL

I

IN the early '70's the territory between the Missouri and the South Saskatchewan might well have been called the "dark and bloody ground," had that designation not been conferred on the Kentucky frontier a century previous. On the north side of the international boundary the Hudson's Bay Co., which in the day of its might kept white interlopers out of its trading grounds, had by this time lost its proprietary control. The Mounted Police had not yet been organized. The country was wide open for lawlessness, organized or otherwise. This was the last grazing ground of the buffalo on the continent and consequently drew thither Indians from every direction. Where the Indians gathered there also gathered wild and reckless men who lived by the systematic degradation and plunder of the red man.

The Northern Pacific pushed through to Fort Benton, Montana, headwaters of navigation on the Missouri, more than a decade before the Canadian Pacific traversed the debatable land. Benton lived up to the lurid accounts shown in the screen's worst westerns. It was a collection of tawdry saloons, bawdies, gambling hells, and unkempt trading counters. The law of the trigger prevailed.

FROM this outpost, and others, American traders moved north into the Blackfoot country establishing scattered trading posts throughout Canadian territory. Their main stock-in-trade was whiskey, although blankets and bright trinkets were also bartered. The trader stood ready for business at a hole in the wall of his stockaded fort with his pail of firewater beside him. As each dusky customer pushed a buffalo skin through the hole in the wall the trader handed out a tin cup, full of liquor. A hide bought one cupful. A fine pony bought a quart of it, or if the conditions of supply and demand were propitious, a girl with raven braids. One well known trader boasted of then living with his 54th bride obtained in that way, with no explanation of what had become of the previous 53.

Many of the traders were Civil War veterans. They knew how to face death, and they knew how

to deal it out. They also knew how to build palisaded forts to withstand Indian attack when some particularly ghastly inhumanity moved the natives to retaliation. Alongside the traders were "wolfers," one step lower than the traders in the human scale. They got their name from their main occupation which was to hunt wolves in the wake of the migrating buffalo. At other times they loafed or worked around the trading posts, always ready for any bloody enterprise that promised loot. The code on the American frontier was different from that established by the North-west Mounted Police in Canada. The Montana frontiersmen had one set of laws for whites and another for the Indian, whereas the strength of the red-coats on the north side of the border lay in the fact that they proclaimed one set of laws for all, and maintained it.

II

IN the fall of 1872 a gang of wolfers in the Bear Paw mountains, which rise out of the Montana plain, were just preparing to return to their base after a successful hunting expedition. However four Cree braves stole into their unguarded camp and made off with their horses, leaving them to walk back to the nearest trading post on their flat feet with all their burden of pelts. As soon as the wolfers could collect mounts they followed the horse thieves over the Canadian border, then unsurveyed, in the general direction of the Cypress Hills. But the wily warriors from the band of Kaki-wish tahaw veered off to the east and threw the enraged pursuers off the trail.

Completely baffled, the whites returned to Fort Benton for the winter to nurse their wrath. In many a bar room session the wolfers boasted of the dread-



ful vengeance they would heap on the red men when the poplars were in leaf again. Their hardened resolve lured other desperate characters to join them. It promised another opportunity to wipe out a band of natives like vermin, and carry off their horses and other possessions. By the time the wolfers set out for the Cypress Hills in mid-May, led by Thomas Hardwick, a Montana sheriff with an unsavory reputation, they numbered about 15 men.

III

WHILE the horse stealing incident was taking place in the Bear Paw mountains, an entirely different scene was being enacted at Okiciza Wakpa, near the present site of Battleford. A large band of Crees had settled down for the winter, to be joined later by Chief Hunkajuka's band of Assiniboines eagerly anticipating the good times to be had in social diversions with their Cree allies during the season of long nights.

As the winter wore on, however, food became scarce and in the latter part of Amhanska, the Long Day Moon (February) the buffalo disappeared completely.

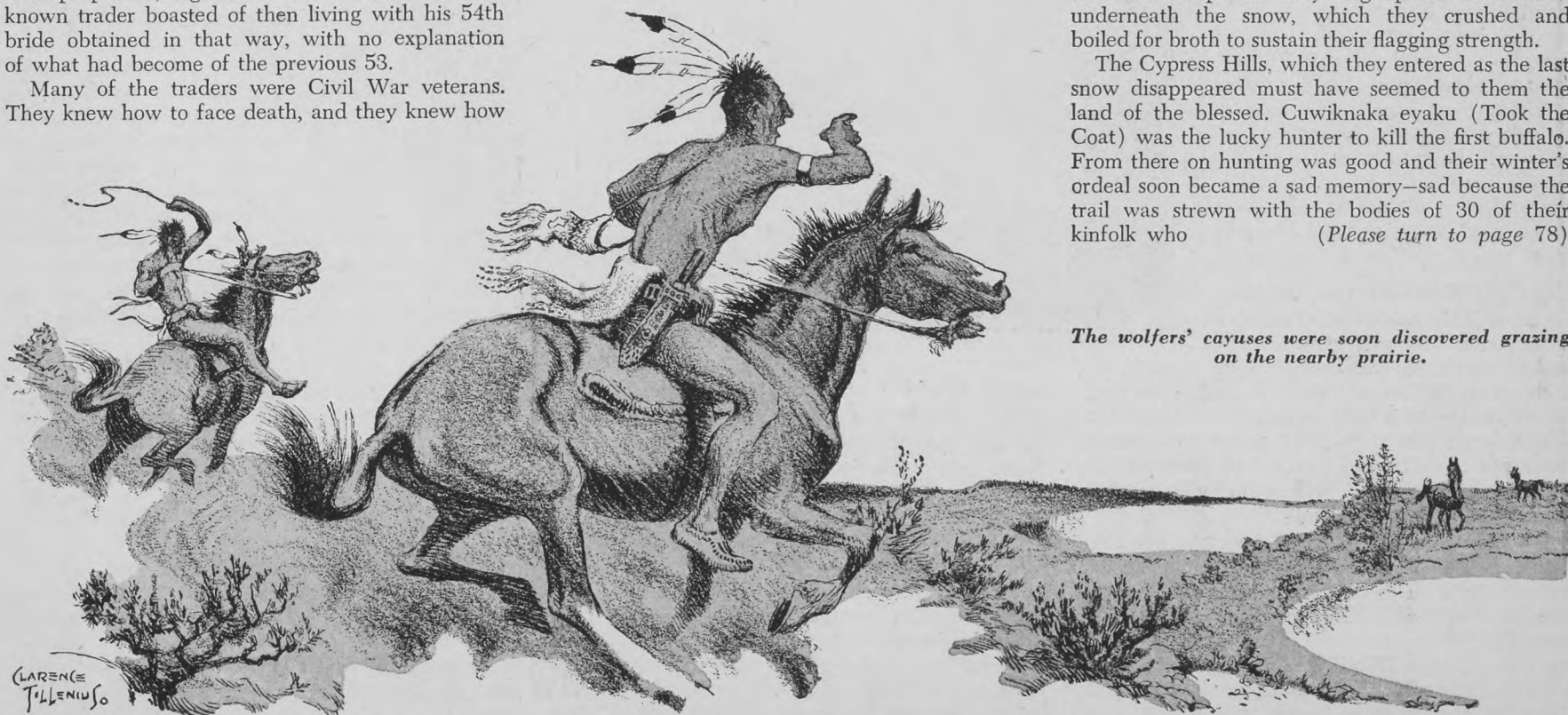
The Indians had to break camp and disperse. Chief Hunkajuka decided to lead his band of Assiniboines southward to the Cypress Hills, a distance of almost 300 miles as the crow flies. The odds against them were terrific. But there was no choice. To remain in the North was to invite lingering but certain death from starvation.

In their mad race with death across the blizzard swept plains the Assiniboines ate their horses, their dogs, and even the flint hides were roasted over the fire to be eaten. Whenever they came across their old camp sites they dug up the bones from underneath the snow, which they crushed and boiled for broth to sustain their flagging strength.

The Cypress Hills, which they entered as the last snow disappeared must have seemed to them the land of the blessed. Cuwiknaka eyaku (Took the Coat) was the lucky hunter to kill the first buffalo. From there on hunting was good and their winter's ordeal soon became a sad memory—sad because the trail was strewn with the bodies of 30 of their kinfolk who

(Please turn to page 78)

*The wolfers' cayuses were soon discovered grazing on the nearby prairie.*



LARENCE  
TILLENUS



**D**ON'T dehorn your cattle! This sounds like strange advice, but under certain conditions and in some localities it is sound. Horns are a detriment in many ways but they are the only means of defence that cattle have and when that arch marauder, the great northern timber wolf, attacks our cattle, they stand no chance with a smooth poll. It is far better to lose the \$2.00 a head dockage on the horned cattle; it is only a small percentage at present prices and would seem preferable to a total loss of the animal by wolves. In spite of their horns the wolves are killing a large number of cattle and damaging many beyond repair along the so-called northern fringe of settlement and for many miles south of that fringe. Wolves have got down as far as the Qu'Appelle Valley, which is some 200 miles from their natural habitat.

The real damage, however, is among the sheep flocks, now mostly disposed of on account of severe wolf depredations. In the past six years we have lost over \$3,600 worth of sheep from this cause. Today sheep flocks in the north have passed from the picture. It certainly hurt to send ours to the stockyards last summer, with ewes thin from feeding lambs, and lambs only half grown, not to mention the wonderful prices for sheep, lambs and wool, together with equipment and fencing left on our hands. Sheep killing by wolves in our locality really got going some seven or eight years ago, with the result that men who had built up nice flocks had to let them go as the lesser of two evils.

This country, northern Saskatchewan, is well adapted for livestock and at one time sheep ran at large, in many cases unfenced. It is a very different story now. There have always been wolves in the north but during the past 30 years their natural food, the big game, has dwindled almost to the vanishing point, while the wolves have increased very rapidly. They appear to have worked down from Alaska and the Northwest Territories in a southeasterly direction, cleaning up the big game or driving them ahead. The deer, in particular, sought the imaginary protection of the settlements, then the wolves found that sheep, calves, pigs, colts and even mature animals were just as good eating and far easier to obtain.

**I. P. CALLISON** of Union, Washington, in his book "Wolf Predation in the North Country," gives a really good account of the damage and range of this terrible animal. Any reasonable man or woman reading this book cannot help but realize that the wolf has to go. The sooner our several governments realize and face up to the situation, the better and cheaper it will be for all concerned. Procrastination is criminal folly.

One wonders what there is about the question that leaves cabinet ministers, game commissioners and executives all down the line in a condition of complete indifference. My opinion is that they remember reading in their school readers of the boy who shouted "Wolf! Wolf!" or perhaps they are really "at sea" for a solution. For the most part I think we are calling on prairie or city-raised men

to tackle our northern problems, subjects on which they are blissfully ignorant, and as we residents up here expressed it "They don't know what the h— to do about it." On the other hand, departments of agriculture and other government speakers urge farmers and ranchers to raise sheep and more sheep!

Wouldn't we like to do just that with prices what they are! We hung on in hopes of government assistance and took a bad beating as a result. We killed many wolves, but it is not a job for the individual, and getting wolves is a full-time job for a man with the know-how, and even he cannot do it driving around in a car.

British Columbia seems to have made a start on

of the said bootlegged wolf skins could have come from Saskatchewan animals, as wolves recognize no boundaries. Furthermore, there is no doubt that many wolves were shot, trapped or poisoned in Saskatchewan, were never picked up and so drew no bounty.

Then again consider the number and value of the game necessary to feed this 1,000 wolf pack, and going even further, what of the natural increase of this same pack, also the natural increase of the game saved and so ad infinitum? Unfortunately, only those who live in the north realize the true score, many of whom not suffering losses of livestock are indifferent to the matter.

The wolf has a great potentiality for destruction and is absolutely unpredictable, is rapidly becoming civilized and losing his fear of the human element and his scents. An article in the Reader's Digest of January, 1951, is likely to be misleading. Much of it is true, but some statements are at variance with the real facts. In one case the writer of this article says, "The wolf is not scared of anything." Maybe, but even a bunch of wolves will back up from a wolverine, a much smaller animal, but with prodigious strength and uncanny intelligence. Wolves do not go out of their way to tangle with a bear only in exceptional cases, and unless really hungry will pass up a bull moose, because they know that they are going to be busy for quite a while. However, they do kill a lot of moose.

**A**NOTHER statement that writer makes, "the wolf is a sportsman with wild game, only killing what he needs, but with domestic stock he kills for the sake of killing, because they are so stupid." The wolf is never a sportsman nor a gentleman. The reason he appears to kill only to satisfy his hunger with wild game is that wild game is seldom found in numbers like a flock of sheep, and if they run on to more than one deer at a time, unless they are pulled down simultaneously, the survivor is miles away before receiving their attention. However, there are numerous instances where a number of deer carcasses have been found strung out, just to show what they can do. He also says, "they are grey and sometimes red. . . ." They run a color scheme from white to black with greys, yellows and silvers in between.

The Saskatchewan Game Branch is trying out 10:80 baits in the north as a tentative effort. Some of these baits

were left with us for placement and consisted of quarters of horse meat inoculated with 10:80. The wolves and coyotes, however, evinced little interest in these baits as a comestible. In some cases the baits were chewed on, but as this poison, although very deadly, takes from one to two hours to work, results are difficult to decide.

It is far more satisfactory to see your wolf, in fact I find it one of the most satisfying experiences to shoot, trap or poison a wolf then gloat over him. Choulish, no doubt, but boy! what a lovely sight to see a really big wolf taking his final nap and looking, at first glance, like a colt or pony lying there.

(Please turn to page 59)



*Left: Comparative size of coyote and wolf pelts.*

*Right: The author with a wolf skin eight feet two inches from nose to tip of tail.*

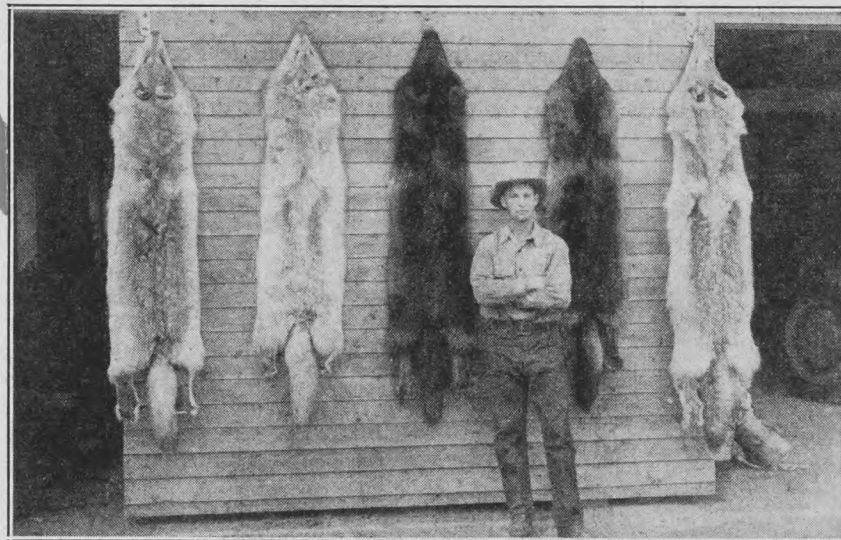
*Bottom: John Ardill of Farrell Creek, British Columbia, standing in front of the pelts of some of the wolves he killed.*



# The WOLF MENACE

*A livestock farmer states the case for war on wolves*

by C. E. CRADDOCK



predators and I wish them every success. The Alberta government considered that the price of the skin was sufficient incentive to kill wolves. This is one case of the ignorance of officials in matters pertaining to the business they are trying to run. Saskatchewan put on a \$25.00 bounty and reduced it to \$10.00 after a one-year trial. Incidentally, the \$25.00 bet pulled in over 1,000 wolves, yet the Minister of Natural Resources stated that it was a terrible burden because wolves were bootlegged from neighboring provinces and the N.W.T. The bootlegging could have been true, but isn't it something like fighting our battles in Europe or Asia before the enemy lands on our own territory? Many



**R**HIZOMA, the new alfalfa, introduced in 1948 by the University of British Columbia, has now shown itself to be a valuable addition to our alfalfa varieties. Reports from farmers throughout the western provinces and Ontario, show that it is extremely hardy, somewhat superior to Grimm in forage and seed yield, and better than any of our common varieties for pasturing purposes.

Its superiority over other varieties for pasturing is due to its rhizomatous type of growth, a feature possessed by no other Canadian variety of alfalfa. These rhizomes increase the spread of the plant, and as they start below the surface of the soil, they enable the plant to resist and overcome the harmful effects of close grazing. It is this rhizomatous habit of growth, frequently referred to as "creep" or "spread," that since the introduction of Rhizoma three years ago, has been most under discussion.

Reports from farmers and experiment stations throughout Ontario and western Canada are somewhat conflicting with respect to this character of spread. It was to be expected in some areas and under certain climatic conditions the development of rhizomes would be restricted, and that in some cases the cultural methods employed would tend also to prevent their development. On the other hand, many farmers described their stands as having thickened up to 50 per cent or more. It was apparent, also, from many reports received, that erroneous conceptions were held with respect to spread. Some growers expected stands to thicken perceptibly the first season. Others were disappointed that although a certain amount of spread was apparent it was not as great as they had expected.

**R**HIZOMA is a derivative from a cross between Grimm, the standard variety of alfalfa in Canada, and a falcata form brought from Russia many years ago by Dr. Hansen, then plant explorer for the United States Department of Agriculture. The cross was made at the University of British Columbia. This falcata form, known as Don, had nothing to commend it, except the possession of a rhizome habit of growth that permitted it to last almost indefinitely in the soil. The original falcata parent, the F<sub>1</sub> hybrids and plants of the succeeding F<sub>2</sub> generation are still maintained in the trial fields. One may see that this union was successful by walking through the trial grounds and noting the many types that have been developed from this cross. Plants with a spread of 30 inches or more, and rows of plants that have grown together, may be observed in the experimental fields.

This breeding project in its later development had the benefit of financial assistance from the Forage Crop Division of the Dominion Experimental Farms, as well as the benefit of guidance by the officers of that division. Tests throughout Canada have been carried entirely by the Dominion Experimental Farms.

As the work of selection proceeded it was evident that a balance had to be maintained between extent

of spread, and forage and seed yield. Plants that spread rapidly and extensively were inclined to be short-stemmed and low in yield, both of forage and seed. Such plants might be ideal for pasture purposes, but it was reasoned that there are few farms in Canada that would be satisfied to take pasture only, from an alfalfa field. Also, it was thought necessary that a high seed yield be a characteristic of the selected strain. In order to achieve this objective of a high-yielding type suitable for hay, pasture and seed purposes, it was necessary to reject many plants with great spread and to include only plants with a moderate degree of rhizome growth.

With this background of breeding before us, we

spring. As these first rhizomes are short, practically no spread will be apparent even during the first hay year. During the latter part of the second summer, under normal conditions, rhizomes will develop in vigorous fashion. But again they do not break through the soil until the following spring. Therefore, creep, or spread, does not become fully apparent until the third season. From then on, under normal soil and moisture conditions, the stands will continue to increase in density.

Whether or not an alfalfa plant will produce rhizomes is determined by its heredity. The force of heredity cannot be destroyed by the environment under which the plant is grown, but the growth and development of the rhizomes are conditioned by various factors such as soil, climate and the cultural methods employed in the seeding and growing of the crop.

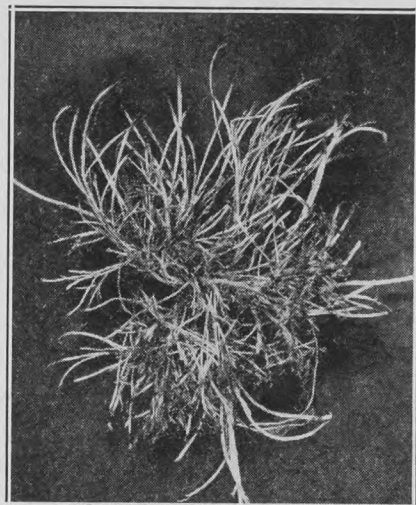
**T**HE rhizomes responsible for spread make their optimum growth under coast conditions, where the long, cool autumn, with heavy rainfall, favors maximum development. The low point in rhizome development is found under conditions of marginal or below marginal rainfall, accompanied by late summer and autumn drought and aggravated by a heavy rate of seeding.

Possibly the most important factors influencing the rate of spread are soil moisture content, soil fertility, and rate of seeding. These factors interact to promote, delay, or check the growth of rhizomes. Usually the rate of seeding of Rhizoma is much too high. Experimental results and observations indicate that when Rhizoma is grown on a strong, fertile soil with adequate moisture, the rate of seeding, even for hay (if seeded without a nurse crop), should not exceed six to seven pounds per acre. Excellent hay stands have been secured with a rate of seeding as low as four pounds per acre. One of the gains to the farmer by the use of Rhizoma is the lower number of pounds of seed required to sow an acre, whether for forage or seed. With a rate of seeding suited to Rhizoma, on fertile, moist soils,

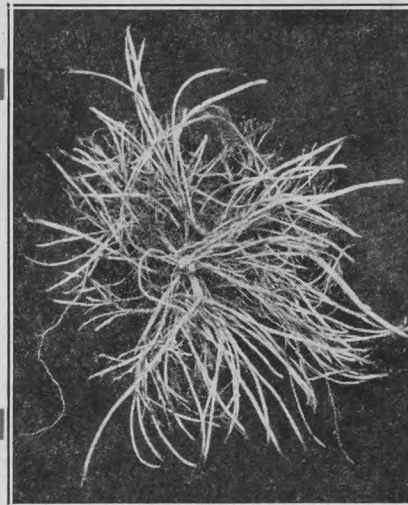
stands thicken to the optimum for plant growth and the carrying capacity of the soil.

Where Rhizoma alfalfa is grown in rows, as much of it has been since its introduction, and where intertillage has been practiced to keep down weeds and promote optimum conditions for growth, it is quite possible that the spread of the crop is being restricted by the tillage methods employed. If deep cultivation is practiced close to the rows there is every chance that the developing rhizomes will be broken and checked. This has been observed at three stations, including the University, Vancouver. Likewise where the crop is broadcast, if cultivated too deeply, the rhizomes are broken off and spread is prohibited. Observation and experience to date would indicate that light, shallow cultivation favors the spreading habit of growth.

A crop of Rhizoma that is grown for seed, particularly under marginal moisture conditions, is less likely to produce (Please turn to page 59)



*Top appearance (left) and underground appearance (right) of two-year-old plant of Rhizoma alfalfa.*

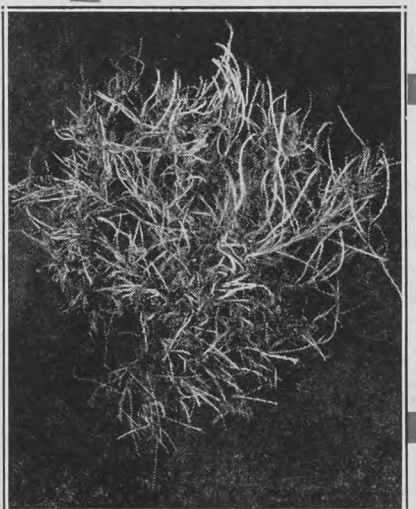


## **RHIZOMA**

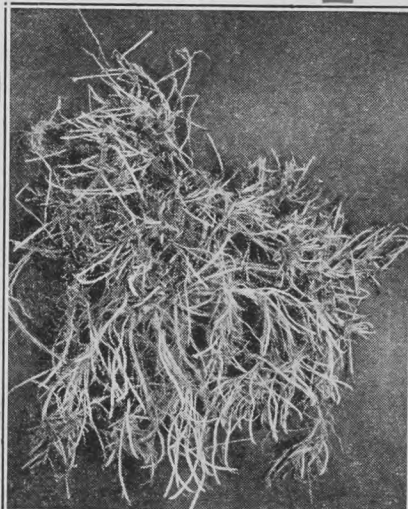
### *The New Alfalfa*

*A description of a hardy, high-yielding alfalfa, which has a spreading or creeping habit where grown in good soil under favorable moisture conditions*

by G. G. MOE



*Above and below-ground views of a Rhizoma plant five years old, showing dense mat of rhizomes.*



U.B.C. photos.

can consider now the nature of the rhizomes, how they add creep or spread, and how and when they develop. An extract from the official description of the variety reads as follows:

"From the under surface of the deepest crown, and from the upper portion of the neck, rhizomes develop which grow horizontally beneath the surface, attaining a length of from three to seven inches or more before breaking through the soil. In subsequent seasons, new rhizomes arise from the underground portions of the old rhizomes, thus slowly increasing the spread or width of the plant. In some cases, secondary plants are formed, and these may develop a secondary root system."

The time when these rhizomes develop should be understood, so that undue expectations with respect to increase in thickness of stand will not be created. During the first season of growth the development of rhizomes is restricted, while the plant establishes its root and stem growth. Such rhizomes as do develop do not break through the soil until the next



THE way I see it when a woman becomes the mother of a 16-year-old boy, she loses all the know-how of understanding men. Take Mom for example. She's the sweetest one of her model, but she has no more idea of what football and track mean to a guy than a female ghost. And that's kind of peculiar, for my older brother Sol was voted best all-around athlete three years running in Midtown High.

Me? I'm twice as big as he was, and where am I? On the honor roll every month, editor of the school paper, president of the senior class. Dim stuff like that. And all the time there's a half-good guy like Bull Kennedy around to star in football and track. But what can you do about it? You can't just come right out and break your mother's heart.

Mom handed me my lunch packed in a brown paper sack. "Are you sure you don't need your coat, Jimmie-boy?" she asked. "It's real cool these early fall mornings."

"Look, Mom, honey," I laughed at her. "I know when I'm cold. I'm a big boy now. Remember? I'm as big as Bull Kennedy thinks he is."

"I wish you and Ralph could be friends," Mom began to worry. "He's a little overbearing, but—" "A little!" I practically yelled. "Why, his head's swelled bigger than a mule's. If he doesn't keep his trap shut, I'm gonna knock—"

"Now listen to me, son. I don't want you fighting with Ralph Kennedy or—"

"Okay. Okay," I said before she got going good. "I've gotta hurry. Good-bye."

I hastily kissed her and bolted out the door. Sol was tinkering with his tractor. I threw a rock and hit the barn door to make him jump.

"Look out!" he yelled. "Better save that energy for football!"

Sol knew how much I wanted to put my energy in football and track, but he also knew how Mom felt about it so I heaved another rock a little closer to him and sprinted down to the highway to catch the school bus. When I hit the bridge, I waved my hat in case he's seen how fast I'd made it.

AT school, I forgot about Sol, about Mom, about track, about everything I'd ever heard before. That was the day Betty Myers started to Midtown High. I took one look at that little redhead and something atomic happened inside me. She was a girl I could go for but plenty! Only with a beautiful girl like her a guy would have to be smooth and good-looking. Say—a guy like Bull Kennedy. I groaned. Ye gods, not him! I had to save her from him. Now if I moved in first, maybe I could keep him and the other wolves away until she could appreciate my good personality and sterling qualities. Mom and my teacher said I had 'em.

I stood around all morning trying to get up nerve enough to say something to her. After the noon recess, I saw her standing by her locker. "Do you want to be a mule all your life?" I asked myself. "Go up and start talking to the girl."

Before I could change my mind, I was right beside her.

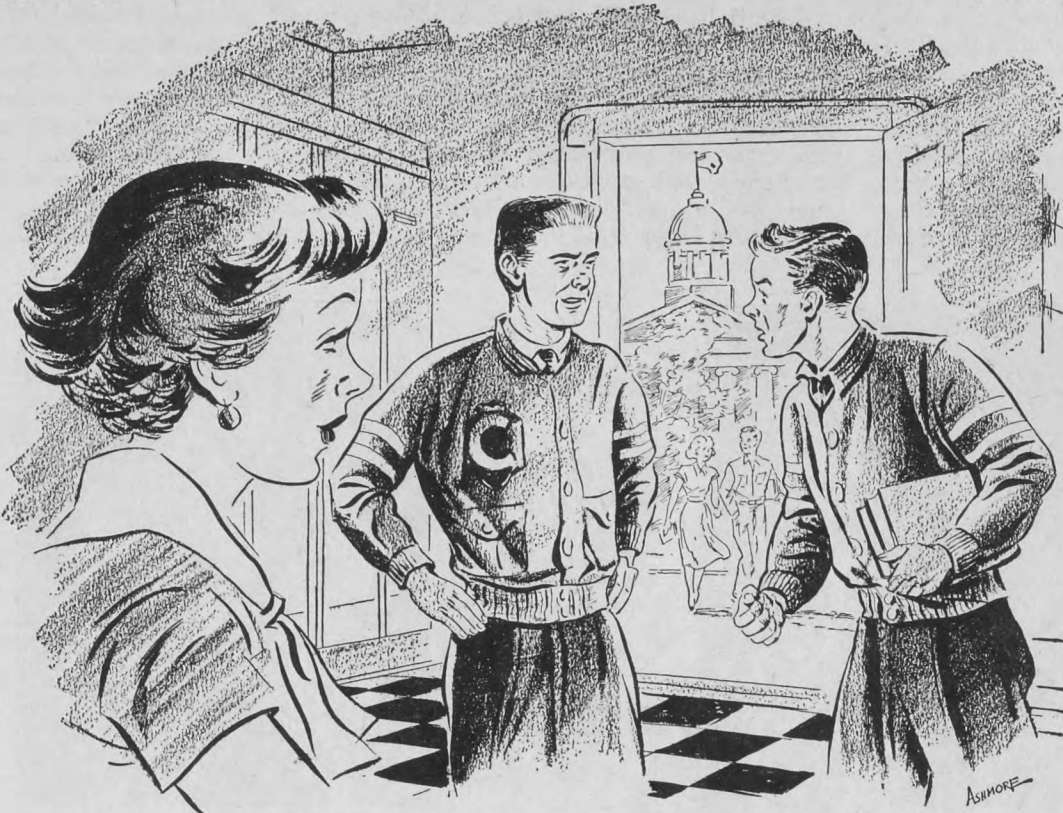
"You're—you're new here," I stammered.

"How did you guess?" she asked coolly, giving me a sideways look out of the most nerve-racking green eyes I'd ever looked into.

"I'm James—Jimmy Jones—" I began.

"Oh," she said sort of breathless and opened her

# A Fellow



"Hey!" I said, "Why don't you put your big foot where it belongs?"

## Has to Fight

by NOVALYNE PRICE ELLIS

Illustrated by C. H. Ashmore

eyes wide, "you're president of the senior class and editor of the Tatler, aren't you?"

"All hundred and seventy pounds," I quipped, while I thought, "Heck, this is easy."

She smiled and I got bolder. I took her schedule out of her hand. English next period! "I write beautiful themes," I told her.

"Wonderful," she said.

I took a deep breath. I was going to ask her for a date if it killed me and the way my blood pressure was acting up, I thought maybe it would.

"I'll be glad to write you a theme any time. How about tonight at 7:30? I'll come to your house."

She gave me another sideways glance that left me paralyzed.

"You really send me, Jimmy!" she said. "But where is the English room? It's almost time for the bell."

**From my point of view Bull Kennedy was a goon but he was the school's star in football and track. I got my name signed to a story in the paper and Betty was my girl. Then Bull started calling me "mama's boy"**

The way she ignored the date angle made me feel kinda silly, but I wasn't going to give up after I'd gone that far.

"Right this way," I said, wishing the English room was two thousand miles away.

Well, I might have known it! Let me carry a pretty, refined girl's books for her and up will come Bull Kennedy. Pearl Stevens, the cute little brunette he went with, wasn't with him, which might have helped keep him from seeing Betty.

From my point of view, Bull Kennedy was a goon. Undiluted. Even back in grammar school, we hadn't liked each other. Everytime report cards came out, I'd be on the honor roll, and Bull would twist my arm trying to make me say he was smarter than I was. Sol said I ought to knock his block off; but when I tried it, he blacked both my eyes and Mom had a fit. She went up and talked to the teacher which made things worse.

In high school, he came out for debating but gave it up after I made the team and he didn't. However, he was voted outstanding athlete and the girls and everybody else went crazy about him. What more could the guy want?

AFTER I was elected president of the senior class, I figured it wouldn't take much to cause a blow-out between us. Bull thought he ought to be president because he was captain of the football team and all that. When I won, Bull hinted that the election hadn't been fair.

He came down the hall straight to Betty and me.

"Hi, fella!" he said to me, but looking at Betty. "Nice write-up you gave me last game."

"Yeah, okay, okay!" I tried to push past him.

"Did you see how we pulled that fake pass on those Dragons?" he insisted, still staring at Betty.

"Yeah," I said. "Yeah, sure."

"I made sixty yards on that play," he croaked.

"Yeah, the line really clicked, didn't it?" I said.

His face turned red. "Look, fella. The line didn't score that touchdown."

He stepped aside but left his foot so that I'd stumble over it.

I stumbled.

"Hey," I said. "Why don't you put your big foot where it belongs?"

"If I did," he cracked, "you wouldn't sit down for a week."

He went on down the hall, looking wise.

"I think I would have hit him," Betty said.

That got me, but I didn't let on. "And get myself expelled right when you're starting to school?"

"He sounded conceited," Betty sniffed.

"That's putting it mildly," I said. I looked at her again. I didn't know a pretty girl could be so smart.

"You don't play football?" she asked.

I might have known that would be the next question. I felt the air being gradually let out of me and my heart sinking down. Gosh, what could I say? How could I tell her about Mom? Could I say, "Mom hates football! Basketball makes her uneasy! She just knows if I come out for track, I'd break my leg! And in her world gentlemen don't hit each other!"

Shucks, you can't explain things like that to a girl. Especially the most beautiful girl in the world.

"I'm a man of brains," I said, making an effort to be breezy.

She smiled. "I like men with brains."

She gave me her address.

When I got off the school bus that afternoon, I sprinted the half mile up to our house without a break. I headed straight for the kitchen.

Mom was making pear preserves. I kissed her hurriedly and spread a hunk of bread thick with butter and preserves.

"Mom," I said, getting to the point. "I need the car tonight."

"But this is a school night, Jimmy-boy," she said mildly.

(P'ease turn to page 72)



# Whiteface Chief

by FRED KENNEDY

IT has been said that honors rest easily upon the shoulders of some men and this is certainly true of Wilfred J. Edgar of Innisfail, Alberta, squire of the Little Red Deer Hereford Farm, and Central Alberta's favorite son.

Alberta Master Farmer, president of the Canadian Hereford Association, former president of the Alberta Cattle Breeders' Association, mentor of junior beef calf clubs, crack rifle shot, outstanding curling skip, the 52-year-old stockman farmer was recently accorded the greatest honor of his career, an invitation to judge purebred Hereford cattle at the famous English Royal Show to be held this year at Cambridge.

It is the first occasion in which a Canadian Hereford breeder has been given this important assignment and when the job is completed, Mr. Edgar will have joined the small select group of Canadian livestockmen previously honored by other livestock breed associations in Great Britain.

The English Royal will be held on July 4, and in conjunction with the show, a world conference of all Hereford Associations also will be held.

The main meeting of this conference will be held at Hereford, England, on July 10, following the preliminary meeting at Cambridge on July 4. Other Canadians who will attend will include D. A. Andrew of Calgary, secretary of the Canadian Hereford Association and either George Rodanz of Stouffville, Ontario, or Alex Mitchell of Lloydminster, Saskatchewan.

When it was first announced that Wilf Edgar had been selected as the first Canadian Hereford breeder to judge the English Royal, no one in Central Alberta was very surprised, because the Calgary-born farmer-stockman, with the compact figure, and the twinkling eyes, is somewhat of a legend in that part of the province. He has been a leader in community enterprises for so long now that no organization would ever think of tackling a major community development job without first consulting the owner of the Little Red Deer Hereford Farm, and then asking him to head the committee.

WHEN the provincial government announced its first Master Farmer competition, and Central Alberta was designated as one of the zones, the government set up an elaborate system of judging and counter-judging.

When conditions of the contest were outlined to district farmers, so many points for the farmstead, method of operation, efficiency of operation, condition of crops, livestock, equipment, accounts, and record of community service, one of them remarked: "Shucks, why waste time holding a contest, give it to Wilf Edgar, he'll win it by a city block anyway." And he was right. After the judges had compiled their cards it was found that Edgar had topped all other contestants by a wide margin. He received \$1,000 in cash, a beautiful plaque, a Master Farmer Certificate, and an M.F. sign for his gate post.

Although Wilf Edgar is now recognized as an outstanding authority and judge of Hereford cattle in North America, it is not generally known that Shorthorns were his first love. It was not until 1932 that he turned to the whitefaces.

His father was a breeder of Shorthorns and a great admirer of the rugged red beef cattle and it was only natural that son Wilfred would follow in his footsteps. In the spring of 1932, he came to Calgary to attend the bull sale, and as he walked into the livestock pavilion, the officials were calling a class of boys' and girls' Hereford calves into the ring.

By the time he had reached a seat high in the pavilion, the class of 36 calves had been lined up. As he looked down on that sea of whitefaces, Wilf Edgar felt an indescribable thrill. His own children were just coming to the age when they too would soon be showing calves, and before he realized what he was doing, he found himself bidding on a purebred daughter of that grand breeding sire Prince Domino 9th, bred by W. A. Crawford-Frost of Nanton, and exhibited by Bert Fox of Nanton.

WILF EDGAR shipped his new purchase all alone in a box car, and then rode from the farm to town, seven miles, with a team and wagon to bring her home. He had just unloaded her in the yard when his father rode into the yard from his farm three miles away. He looked at Wilf and then he looked at the little Hereford calf. He walked around it and took another good look. Finally he said in a somewhat unenthusiastic voice, "Boy, what do you think you are going to do with THAT?"

Wilf wasn't quite sure himself but nature settled the question for the Edgar family because the calf was killed by lightning several months later, and Edgar was out of the Hereford business just as quick as he had gotten into it.

*Wilf Edgar of Innisfail demonstrates again that late converts are the most zealous*

However, the Hereford bug had bitten deep and next spring saw Wilf Edgar off again to the Calgary sale, where he purchased three baby beef heifers.

That fall, another outstanding Alberta livestock man, Claude Gallinger of Edmonton and Tofield, was making the change from Herefords to Shorthorns and at his dispersion sale in 1933, Mr. Edgar bought four top cows

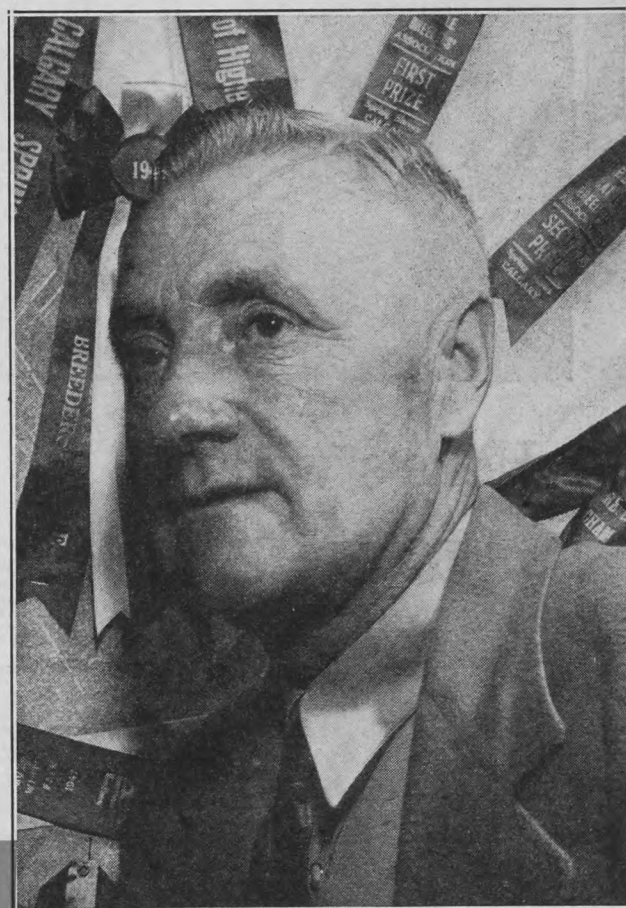
and six heifers, mostly granddaughters of Prince Domino 9th. His first herd sire was Bocaldo Donald 795th, purchased from Charles Bull and Son of Midnapore, Alberta. He was used for a year as herd sire and then he was shipped to the Calgary bull sale, where he won his class.

Wilf Edgar was now pretty well launched as a breeder of purebred Herefords but that was only the beginning. The Innisfail district in those days was quite a Shorthorn stronghold, but Wilf Edgar was bringing favorable publicity to the district and his neighbors were impressed.

His next big purchase was an outstanding herd sire, Donald Stanway 9th, which he obtained from Mr. Crawford-Frost. That bull left a great bunch of breeding cows and his first heifer calf was grand champion baby beef at the Calgary show. It was shown by his young daughter Jean, who later was to win national honors as a judge of beef cattle.

Three years later, Donald Stanway 9th was sold at the Calgary sale and went to Manitoba, where he left his mark in that province, especially in the herd of Watson Dunn.

By 1939, the Little Red Deer Hereford Farm was



Wilfred J. Edgar

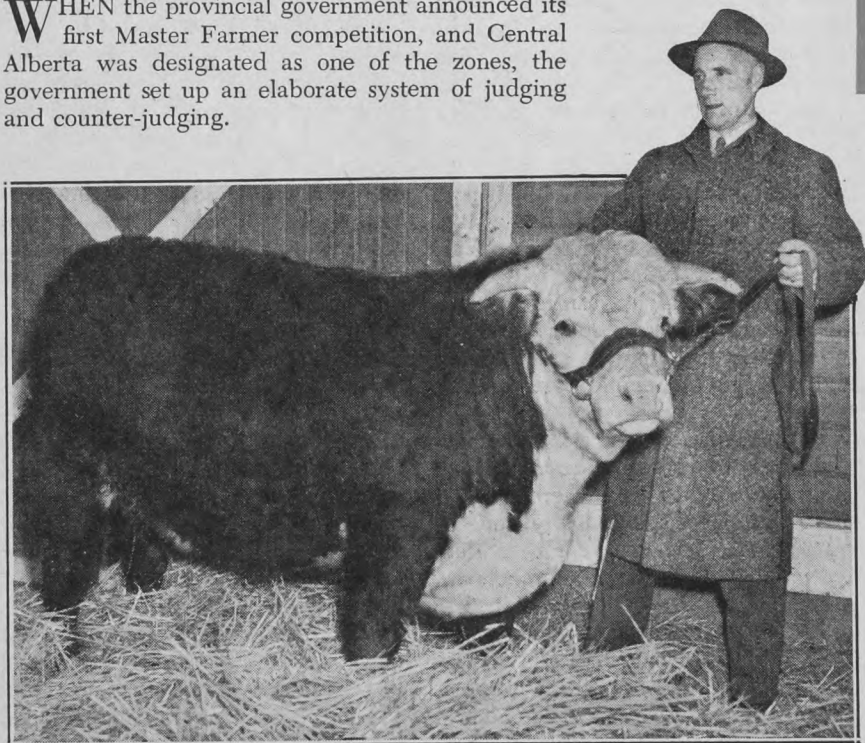
making its mark in provincial Hereford history. In the short space of six years the LRD herd was becoming internationally known, but Wilf Edgar was far from satisfied. Nothing but the best was going to suit him.

That same year he purchased Prince Caerleon 9th from Mr. Crawford-Frost. This was truly a great breeding sire. His first crop of calves, 12 in number, bred to LRD cows, produced six bulls and six heifers, and it was this crop that really put the LRD Hereford Farm on the map.

Among the numerous awards won by them was grand champion bull at the Calgary Exhibition and Stampede (this by Domino LRD). At the Calgary bull sale the following spring some of these calves won a first, a second, best pair of bulls, best three bulls, while daughter Jean again won the grand champion baby beef award with a heifer.

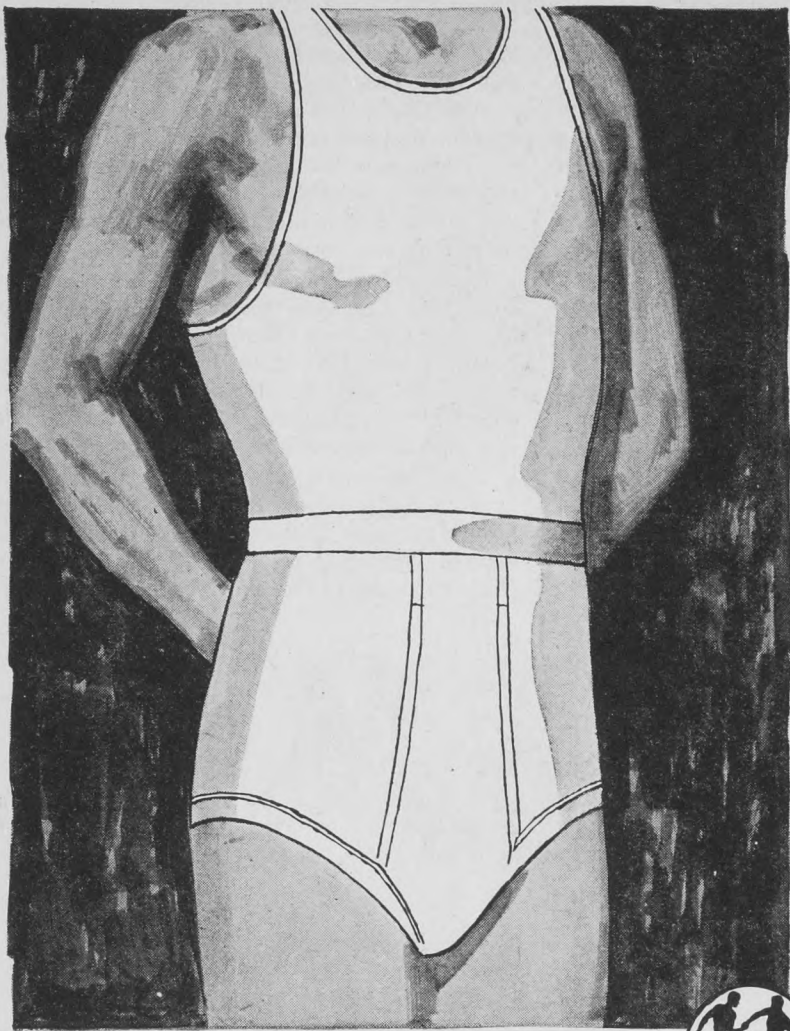
In 1945, a son of Domino LRD won grand champion bull at the Calgary show and sale. Two full brothers of this bull have won reserve grand champion and reserve senior champion.

As the years rolled on, the fame of the LRD Herefords spread. They won prizes at the historic Toronto Royal Winter Fair. In 1949 an LRD sire topped the Calgary bull sale at \$3,500, and a trophy room crammed with (Please turn to page 26)



The master himself with one of his yearlings at Little Red Deer.





## Here's why you can be glad to be a male this summer

Stanfield's Athletic Underwear air-conditions  
your skin... keeps you cooler, more comfortable.

Shirts and Shorts are styled and  
knitted for form-fitting ease in action.

Double front-and-back panel for extra comfort  
and double wear in Stanfield's.

First quality elastic woven in spun-rayon  
waistband for permanent comfort...  
stays lively for the life of the garment.

Mild masculine support—with no extra  
bulk or added warmth.

Smooth, no-roll leg bands stretch easily—  
can't bind.

Mercerized or plain cotton knit in small, medium,  
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*P.S. to Mothers:* These same extra-value features make  
Stanfield's Athletic Underwear for boys  
a better buy.

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STANFIELD'S LIMITED, TRURO, N.S.

## Will B.C. Voters Be Reconverted?

*The coalition government believes that its present  
unpopularity will evaporate, come election day*

by CHAS. L. SHAW

THE British Columbia government isn't going to let a little thing like unpopularity stampede it into an early election. The government is going to retain power as long as it can, which will probably set the next provincial vote sometime in 1953.

Spokesmen for the government feel rather resentful that the coalition should be in such low public favor just now after it has been trying so hard to give the province an efficient administration. They take the position that the average taxpayer just doesn't seem to realize how wise the government has been and that it may take a little while for this recognition to sink in. The argument is that an election now would be unfair, not only to the government but to the rank and file of voters who during the coming months may appreciate the coalition for what it is worth and come to the conclusion that hospital insurance, the present liquor situation and various other things for which the powers that be in Victoria have been condemned are really blessings in disguise.

In other words, the government feels that time is a great healer and that tempers that rage in March and April are likely to cool off by next winter and certainly by 1953, unless the coalition should take some deplorable mis-step in the meantime.

THE government has been belabored over hospital insurance almost continuously since the opening of the session of the legislature. It has been attacked in the press, in public meeting and by a wide variety of organizations and special groups. Two of its party members even deserted it. Petitions have been in circulation demanding that the government reduce the premium rate or resign.

The government has no intention of doing either, but it realizes that it has a big selling job to perform, and during the next few weeks cabinet ministers will be making speeches all over the country defending their stand on the controversial issue. Premier "Boss" Johnson, still disabled by the automobile accident he suffered in Quebec more than a year ago, has already started the missionary work.

Friends of the government feel confident that conditions are just too good in British Columbia to create fundamental unrest. They point out that people naturally don't like to pay more for premiums or taxes or prices, but that this discontent will pass. Employment is high, business is prosperous and everyone seems to have money; the stock markets are booming and the big companies are getting bigger.

In some quarters there is some misgiving about this last trend. People are beginning to ask whether it's a good thing to have industry concentrated in a few hands rather than scattered among large numbers of individual concerns. This point has often been discussed in connection with the forest industry, and it was underscored a few days ago when it was announced that two of the biggest timber companies in the province, con-

trolling sawmills, pulp mills and plywood and shingle factories proposed to amalgamate in a \$100 million merger. It was recalled that the deal would narrow down still further the ownership factor in the west coast's greatest industry operating its most important natural resource. A few years ago there were dozens of fair-sized lumber concerns active; today the big ones could be numbered on the fingers of one hand.

There are many good reasons for this concentration. They insure application of modern and efficient methods because the average small operator simply cannot afford them; they reduce overhead and thus tend toward more economical production, and they give industry a stability that might otherwise be lacking. But undoubtedly there are still a great many people in Canada who don't like seeing economic control passing into a steadily contracting group. They ask whether in the process a lot of deserving little fellows aren't being squeezed out.

FRASER Valley berry growers are a long way from harvesting their 1951 crop, but they are already showing anxiety over the market prospects, and the rising costs of production. Shipping crates which cost about 25 cents before the war are now 65 to 75 cents; barrels that used to cost about \$3.25 are now obtainable at not less than \$7.40. Labor is up, of course, and so is the cost of fertilizer, insecticide and just about everything else.

Competition from European countries, notably Holland, may be a more serious factor than usual. At one time there was an assured market in the United Kingdom for surplus berries, but with Dutch berries available that outlet has temporarily gone. Dutch berries have also successfully invaded markets on this continent. In fact, B.C. berries are likely to receive more competition than ever this year, even from Ontario which for the first time in history shipped about 40 carloads of fresh strawberries to the prairies last year at a price considerably less than Fraser River growers have been asking.

Poultrymen in this province have done somewhat better than the fruit-growers in winning compensation. To help offset their troubles, which were due to their flocks contracting Newcastle disease, they have received more than \$850,000; this amount presumably covering the official destruction of 288,801 birds.

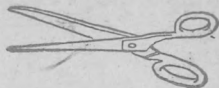
The disease was first observed in British Columbia in February, 1950, and at first the policy was to destroy the birds and not attempt to treat them. However, poultrymen began to realize that if this policy were carried out the result would be total annihilation of their flocks. Treatment with the Doyle-Wright vaccine was tried and so far nearly 300,000 birds have been treated. It is still experimental, but the results so far indicate that it may provide the solution for a problem far more serious than any other confronting the poultry industry here for many years.



# 1951 recommendations for better weed control with DOW WEED KILLERS

Good weed killers will be more important than ever in 1951. The *right* weed killer . . . used *right* . . . can increase yield per acre and it can help save man power. This chart has been made to help you get better results by using weed killers properly. Cut it out and use it for a guide.

Dow offers you a choice of several crop-proved, time-tested products . . . a *right* weed killer for nearly every farm weed, brush or grass problem. For more information, ask your dealer. He knows his business.



WHAT to spray	WHAT to use	HOW MUCH to apply	WHEN to use	WHAT it controls
Wheat, Oats, Barley, Rye	ESTERON 44	1/2 to 3/4 pint in 5 to 10 gal. water per acre.	When plants have reached 3 leaf stage, and grain at full tiller stage	Mustard, Stinkweed, Canada Thistle, Russian Thistle, Perennial Sow Thistle, Pigweed.
	2,4-DOW WEED KILLER FORMULA 40	1/2 to 4/5 pint in 5 to 10 gal. water per acre.		Mustard, Stinkweed, Canada Thistle, Russian Thistle, Pigweed.
	ESTERON DUST #5	5 to 8 lb. per acre.		Mustard, Stinkweed.
Corn and Flax	ESTERON 44	1/2 pint in 5 to 10 gal. water per acre.	Corn when up to 10" and flax when at 4 leaf stage.	Mustard, Stinkweed, Canada Thistle, etc.
	2,4-DOW WEED KILLER FORMULA 40	1/2 to 3/4 pint in 5 to 10 gal. water per acre.		Mustard, Stinkweed, Canada Thistle, etc.
Grain interplanted with alfalfa, sweet clover	DOW SELECTIVE WEED KILLER	2 1/2 to 3 quarts in 50 to 75 gal. water.	When crop 4" to 6" tall.	Mustard, Chickweed, Shepherd's Purse, Ragweed, Stinkweed, Pigweed, etc.
Peas	DOW SELECTIVE WEED KILLER	2 1/2 to 3 quarts in 50 to 75 gal. water.	When crop is 4" to 8" tall.	
Grass Control	SODIUM TCA 90%	50 to 100 lb. per acre.	Best — immediately following plowing and cultivation.	Quack grass.
Sugar Beets	SODIUM TCA 90%	8-10 lb. per acre.	Pre-emergence soon after planting.	Certain spring annual grasses such as green and yellow fox-tail.

use this chart for best results

Use the right DOW WEED KILLER . . . use it right!

where to buy!

NOTE: Complete directions for application are given on the labels of the various Dow Products. Be sure to follow these directions on the labels.



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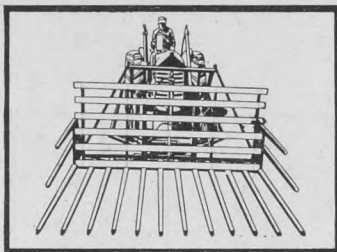
# WHEN IT COMES TO STACKING!

## HORN - DRAULIC PUSH-OFF STACKER

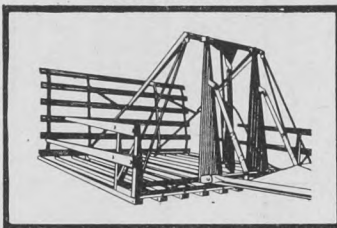


GATHERS,  
LIFTS AND  
STACKS YOUR  
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PROBLEMS!

A ONE-MAN  
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COMPLETELY  
HYDRAULIC.  
STACKS OVER  
23 FEET!

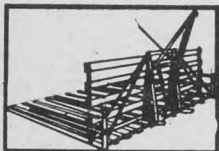


A CLEAN SWEEP WITH A MAXIMUM LOAD EVERYTIME WITH HORN-DRAULIC!



### MAKE HAY THE HORN-DRAULIC WAY!

No cumbersome Superstructures or bulky framework to get in the way with the easily mounted HORN-DRAULIC! 4 pins mount or dismount. A one-man haying operation. Push-Off Stacker is just 1 of 10 Labor Saving Attachments available with HORN-DRAULIC! And remember, HORN-DRAULIC operates off most tractors' own hydraulic system. If your tractor has no hydraulic system, the famous Horn pump gives you hydraulic control NOT ONLY for your loader but for MANY other implements.



#### BUCK RAKE!

Gathers, Lifts and Dumps:  
Another time-tested hay tool  
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#### GRAPPLE FORK

With the Loader Boom and Hydraulic Grapple Fork, your hay handling from the stack is simplified.



#### SEE YOUR LOCAL DEALER OR WRITE!

Horn-Draulic Loaders and Stackers are sold in Canada from coast to coast. The name HORN assures you of sales and service. It will pay dividends to get the facts on HORN-DRAULIC. Write today.

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661 Wall Street, Winnipeg, Man.  
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STEEL TIPPED WOODEN TLETH

PUSH-OFF WITH HYDRAULICS

8' x 10' CAPACITY

EASILY INSTALLED

ONE MAN OPERATION

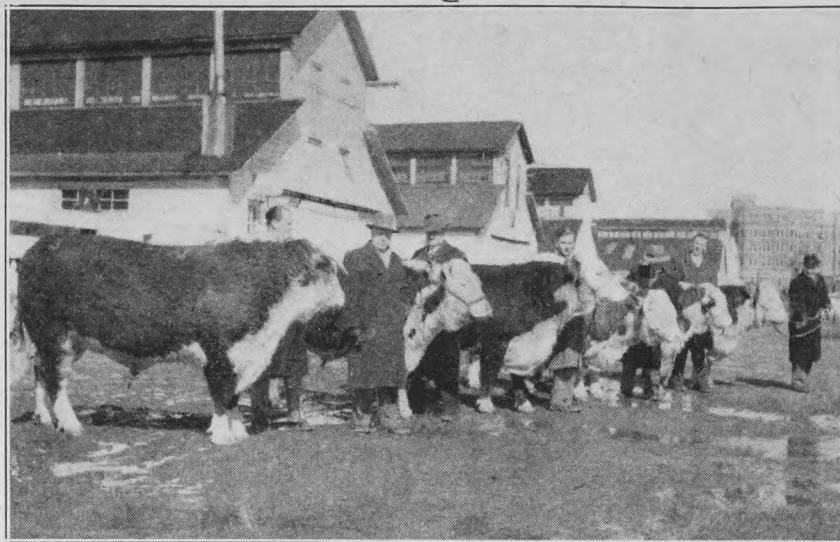
1 OF 10 ATTACHMENTS

YEAR 'ROUND OPERATION

DESIGNED FOR MOST TRACTORS

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## News of Agriculture



These Hereford bulls were purchased at the recent Regina Bull Sale for service in Saskatchewan community pastures.

### Bulls for Community Pastures

ERIC BEVERIDGE, livestock commissioner, Saskatchewan Department of Agriculture, was an active bidder at the Regina bull sale in late March. He bought 13 good Hereford bulls for use in three of the provincial community pastures. Price paid ranged from \$700 to \$800, averaging \$720.

The lands branch operated ten of these pastures last year and provided breeding services in eight of them. Art Thomson, director of the branch, says that 6,041 cattle grazed in them during the summer, including 1,978 in the fields set aside for breeding stock. In addition 57 horses and 254 sheep were pastured. Patrons totalled 436.

Three of the bulls bought at the Regina sale went to the Mankota pasture, four to the Valjean pasture near Secretan, and six to the Matador pasture near Kyle.—J.T.E.

### British Get Argentine Meat

FOR ten months, the United Kingdom and Argentina have been bargaining about meat. In the meantime the meat ration of Britishers has been cut to about ten cents' worth per week. Finally, on April 23, a new meat contract was agreed to, by which 200,000 tons of meat will be shipped to Britain as soon as possible. The agreement was signed in Buenos Aires after seven weeks of final negotiation.

Britain formerly paid £97 per long ton (2,240 pounds) but will now pay £146 for chilled beef, £126 for frozen beef side, £118 for frozen sides of poorer quality, and £130 for lamb. Britain will also secure 30,000 tons of canned corned beef at an unannounced price, and may make a similar agreement with Uruguay, which customarily receives the same price as Argentina, from Britain. Britain has also agreed to pay Argentina £16,750,000 in full settlement of all claims under the old 1949 contract, and for losses due to the devaluation of the British pound.

### More Tariff-Free Items

THE 1951 budget presented to Parliament by the Minister of Finance provides for additional free entry of farm equipment. This is an extension of the policy initiated in 1944 by the then Finance Minister, the Rt. Hon. J. L. Ilsley. Items already provided for in the tariff schedule as admissible free of duty for farm pro-

duction were: grain crushers, grain or hay grinders, hay loaders, hay tedders, potato planters and diggers, fodder, feed or ensilage cutters, post-hole diggers, stumping machines, and grain loaders or elevators with capacity not exceeding 40 bushels per minute.

Added to these this year are grain or hay driers, milk coolers, steel stanchions or milking pens and equipment for milking parlors, automatic stock-watering bowls, individual sprinkler irrigation systems, barn litter carriers and hay fork assemblies.

### Coarse Grains Plebiscite

COARSE grains produced in the prairie provinces are now marketed compulsorily through the Canadian Wheat Board. Authority for such marketing is contained not only in the extension of The Wheat Board Act, but this extension is made operative by special legislation passed by the legislatures of Saskatchewan, Alberta and Manitoba.

When the legislation was passed two years ago, the Minister of Trade and Commerce, Hon. C. D. Howe, made it clear that if any one of the provinces failed to pass this legislation the compulsory features respecting coarse grains would not be continued by The Wheat Board.

The government of Manitoba at its recent session proposed, and the legislature approved, a plebiscite on the question some time later in 1951, after the returns from the marketing of 1950 coarse grains have been received by farmers. This plebiscite will come at a time after Manitoba farmers have had two years' experience with the compulsory marketing of coarse grains. They will be asked a simple question "Do you wish to continue to sell your oats and barley as at present?" If the majority of Manitoba grain growers vote "No" to this question, the legislation will be repealed in Manitoba.

### Feeders' Days

THE thirtieth annual Feeders' Day at the University of Alberta will be held on Saturday, June 2. This event, which is a very popular one in the province of Alberta, is sponsored by the Department of Animal Science, and takes place at University Farm, which is located a mile or two from the University proper. On this occasion, the staff of the Department report on the experimental and research work carried on during the previous 12 months in the fields of swine,

## "RHIZOMA"

### The New Alfalfa

Hardy Northern Grown Seed  
Heavy Hay Crops — Big Seed Yield  
"Rhizoma" is distinguished by its creeping or spreading habit of growth and withstands heavy pasture. Seeding rate is 4 lbs. per acre.

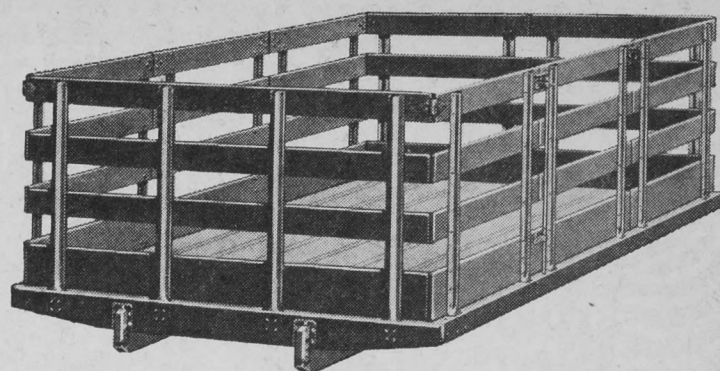
### BRACKMAN-KER

South Edmonton New Westminster  
Alberta B.C.



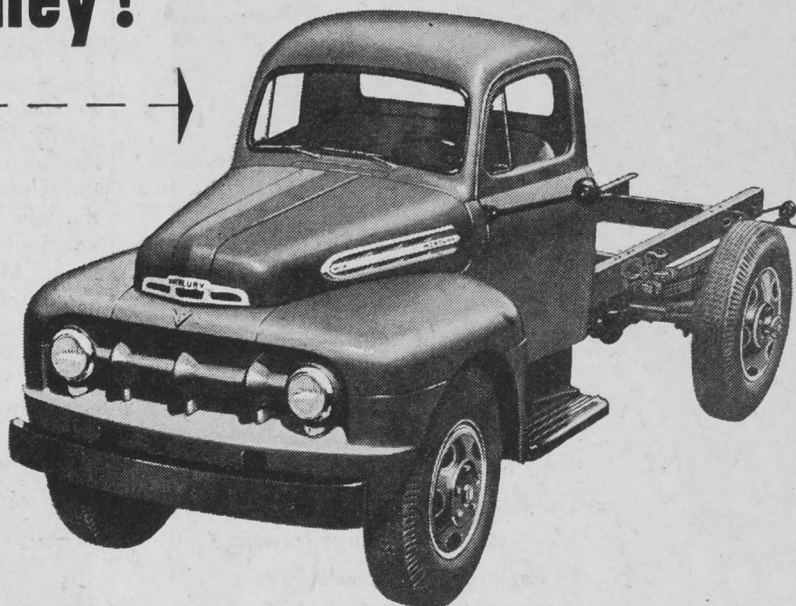


# This makes the money!

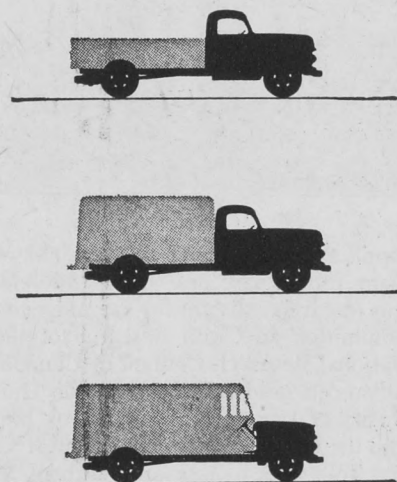


# This saves the money!

Successful trucking demands the utmost efficiency and economy of operation. It is most important that you select exactly the right truck for your job *plus* the right body. Your Mercury Truck Dealer will assist you in making your selection from over 80 Mercury models from ½ to 5 tons—7 great series—3 mighty V-8 truck engines—12 rugged chassis. Your dealer will point out the advantages of the largest line of Mercury Trucks ever built—the money-saving features—the extra strength for safety and long life—the driver comfort features—the reserve power for speed and ease of handling.



## Select exactly the right truck for your job



The Mercury M-4: one of seven series, can carry a payload well over two tons. Comfortable, good looking and rugged, the M-4 with its low initial cost, low upkeep and low operating cost is among the most practical and economical on the road today. With a variety of bodies the M-4 is ideally suited to general farm use. All Mercury Trucks are powered by famous Mercury V-8 Truck Engines. Years of research and constant improvement have made these engines the finest of their type in the world. See your Mercury Truck Dealer . . . he understands your trucking requirements.

**MOVE IT WITH MERCURY FOR LESS**

# 1951 MERCURY TRUCKS

See your Dealer for your free copy: "How to select the right truck for your job"



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Portable  
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Recognized by their  
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They're FRESHER because FRESH POWER — chrome protected for life — is ready to surge forward, to pack that kick you always find in BURGESS Portable Radio Batteries.

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BURGESS Flashlights and Batteries are guaranteed and designed to work as a team for economical operation so for best results buy both.

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**KRALIN**  
means  
**EFFICIENT OPERATION**  
of All your  
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**Equipment**

and only  
**KRALINATOR**  
filter Cartridges  
contain  
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Mobile farm equipment is expensive. That's why it's good economy to invest the small amount required to keep your oil clean all year round. Yes . . . for a very small amount you can give your engines the safe and complete protection of activated Kralin . . . the miracle oil-cleansing ingredient found only in Kralinator Filter Cartridges. Stock up with a supply of easy-to-install, easy-to-change Kralinator Filter Cartridges today. Remember . . . they contain Kralin and Kralin cleans oil twice as fast!

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**KRALINATOR**  
CARTRIDGES & OIL CONDITIONERS



sheep, beef cattle and dairy cattle investigations. Those who have attended this event in other years will need no urging to attend in 1951 if it is practicable. To all others, the coming event presents an opportunity which should not be missed. Proceedings begin at 10 a.m. in the Livestock Pavilion at the University Farm, Edmonton.

**T**HE first Annual Feeders' Day at the University of Manitoba will be held on June 1, beginning at 11 a.m. Organized under the direction of the Department of Animal Science, mem-

bers of the staff will present to livestock feeders and breeders, experimental results secured during the past year in swine and beef cattle nutrition, and swine and sheep breeding. Included will be a discussion of the use of the animal protein factor and antibiotics, and frozen and musty grain. An interesting day is promised for all who can get to the University on June 1. Facilities will be provided for those bringing lunches. Those who do not care to bring a lunch can purchase a lunch on the University grounds at a moderate price.

### Appointments and Resignations

**I**N mid-April the appointment was announced of Dr. A. G. McCalla, as Dean of Agriculture at the University of Alberta. Dr. McCalla, who has been professor of plant science at the University since 1944, succeeds the late Dr. R. D. Sinclair who died last September.

Dr. McCalla was born in Lincoln County, Ontario, at St. Catharines. He was graduated from the University of Alberta in 1929, receiving his Master's Degree there in 1931. He secured his doctorate from the University of Cali-

fornia when he was about 15. He was graduated from the Ontario Agricultural College, Guelph (1926), secured his Master's Degree in animal husbandry at Iowa State College, Ames (1928), and until his removal to Winnipeg had spent nearly 20 years at the University of Saskatchewan. He also wrote several books, and is very widely known, particularly in western Canada, as a speaker and judge of livestock. He has been a director of the Royal Bank, and last year was a member of the Red River Valley Flood Board. It is understood that he refused nomination in an Alberta federal constituency, and accepted the reputedly safer Brandon prospect, in the expectation that he will not have to serve too long as a private member before some advancement comes his way.



Dr. A. G. McCalla

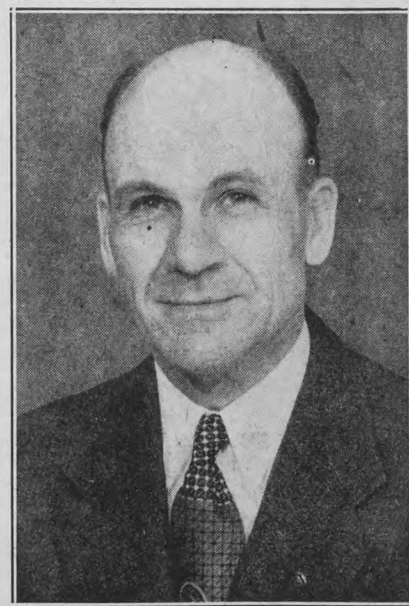
fornia two years later in the field of plant physiology, and until 1940, he was research assistant for the Associate Committee on Grain Research of the National Research Council of Canada. Advanced graduate study at the University of Upsala in Sweden took him into the field of protein chemistry. This was followed by his appointment as professor of field crops at the University of Alberta in 1941, which department was enlarged in 1944, and has since been known as the Department of Plant Science. In 1950, Dr. McCalla was appointed a member of the National Research Council of Canada, as the representative of Alberta, succeeding Dr. Robert Newton, former president of the University.

**T**HE resignation of J. W. G. (Grant) MacEwan as dean of agriculture and home economics at the University of Manitoba, occurred in April, following his acceptance of a nomination in the federal constituency of Brandon. Dean MacEwan came to the University of Manitoba in September, 1946, from the University of Saskatchewan where he had been professor of animal husbandry.

Born in the Brandon area (1902), his family moved to northeastern Sas-

**F**IRST principal of the newly established School of Agriculture at Fairview, Alberta, in the Peace River District, is J. E. Hawker. Announcement of his appointment was made recently by the Hon. D. A. Ure, Minister of Agriculture.

Mr. Hawker is a native of Edmonton who has been, until his new appointment, instructor in horticulture and botany at the Vermilion School of Agriculture. Entering the University of Alberta after some experience as a teacher, he was graduated in Arts in 1939, and secured his B.Sc. in Agriculture in 1940. Mr. Hawker joined the staff of the Drumheller High School in 1941, and became instructor in field husbandry and dean of men at the Olds School of Agriculture in 1943, in which institution he also acted as supervisor of junior crop clubs. He was transferred to Vermilion when this school was reopened in 1945, and became instructor in science and dean of men. He assumed his new position on April 1.



J. E. Hawker



## Get It at a Glance

Gleaned from here and there and of interest to farmers

A NEW SOUTH WALES, Australia, farmer found a new use for a milking machine. He was bitten on the toe by a snake, and having no means of extracting or sucking out the poison, he quickly scarified the wound and started up his milking machine, attaching a teat cup to his infected toe. The machine removed both blood and poison, and is reported to have saved his life.

STAFF experts of the Joint Economic Committee of the U.S. Congress have recently proposed a meat tax, on the ground that an excise tax on meat would fit the requirements of a luxury tax. The argument is that grain-fed livestock is bad economics, since only 4¼ pounds of beef are recovered from each 56 pounds of corn fed to a steer.

THE British Friesian Cattle Society last October imported 70 Dutch Friesians (Holsteins), which it sold at auction for £188,055. The Society's profit on the deal, according to Farmer and Stock-Breeder, was £135,442. Membership in the British society at the end of 1950 was 9,819.

AS at February 28, this year, the U.S. government had \$2,598,653,000 invested in farm price-support loans and inventories, through the Commodity Credit Corporation. Loss on these operations from June 30, 1950, had amounted to \$231,797,000.

IN 1942 Britain purchased 3,000 cartons of honey from Canada, and stored it in Liverpool. While in storage, air raids damaged the warehouse, and made the removal of the honey too hazardous. Eight years later it was placed on the market and only ten tins were completely unusable. Otherwise the quality was reported as excellent.

ON April 10 a group of 15 richly bred Holstein bulls were shipped from Malton Airport, near Toronto, to Buenos Aires. Selection has been under way since November, and involved the preparation of five-generation family trees.

THE annual sale of bred sows at the Manitoba Winter Fair, Brandon, on April 5, saw 68 sows auctioned for an average of \$180.73 with a top of \$500. John H. Conner, Manitoba's Livestock Commissioner is reported as saying that the sale average was the highest of any purebred sow sale in Canada.

THE average U. S. consumer in 1950 used 182.5 pounds of all grain products for food, as compared with an average of 213.3 pounds for the years 1935-39. During the intervening period, average consumption of wheat flour dropped from 159 to 135 pounds, and of cornmeal from 22.9 to 13.5 pounds.

A BRITISH Friesian (Holstein) cow Xed Harlech Bunty R. M. has, according to Farmer and Stock-Breeder, broken the world breed record for fat production in her sixth 365-day lactation, by producing 1,682.5 pounds fat from 33,450¼ pounds milk, testing 5.03 per cent. This beats a previous British record made in 1947, of 1,632 pounds fat from 35,231 pounds milk.

A SHIPMENT of 200 turkey poults born in Winnipeg, Saturday, April 16, were shipped to a farm near London, England by air, a few hours after they came from their shells, and had their first meal in their new home two days later.

THE daily press reported on April 18 that one load of 27 black steers, averaging around 1,230 pounds and fed by M. L. Bates of Gilbert Plains, Manitoba was sold on the Winnipeg market at \$33.50, for a total of more than \$11,000.

INDEX of prices received by Ontario farmers for farm products in February were slightly more than three times the 1935-39 average, and reached 302.6, whereas the average for all provinces combined during February, was 271.9. Only three provinces, Ontario, Quebec (291.7) and Alberta (275.3) exceeded this average. Lowest was Prince Edward Island, where the index of prices received was 199.8.

DURING 1950, more than 57,000 Saskatchewan cattle were tested for Brucellosis (Bang's disease) according to Provincial Veterinarian, Dr. R. B. Waechter.

NO one knows the annual loss caused by weeds in Canada, but every once in a while someone tries to estimate it. The latest estimate, by H. E. Wood, Chairman, Manitoba Weeds Commission, places the loss at \$150,000,000 annually, or about 10 per cent of the gross value of all Canadian field crops.

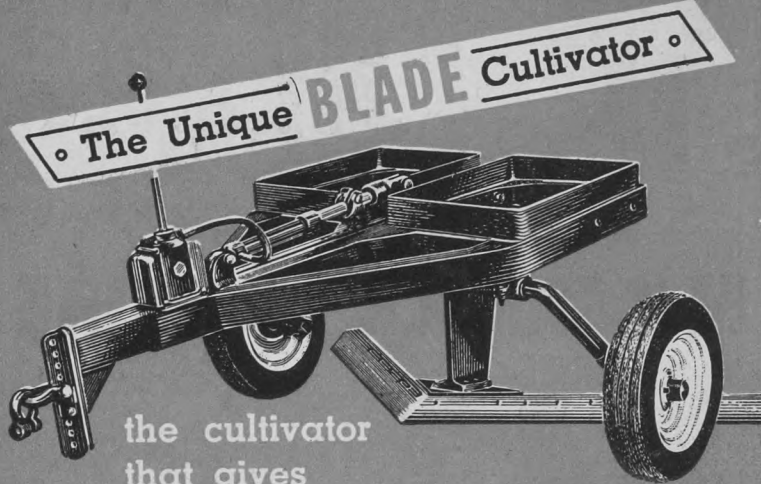
THE minimum age for admission to Alberta's schools of agriculture at Olds, Vermilion and Fairview, is 16 years. There are no academic requirements for entrance. Details of the 1951-52 courses have been announced, and are available from the principals of the several schools, or from the Superintendent of Schools, Alberta Department of Agriculture, Edmonton. The regular fall and winter courses will begin on October 23, and close on April 9.

MANITOBA claims the first provincial 4-H club ever organized in Canada. It was completed in Brandon, and will help to develop junior club programs in Manitoba. The U. S. name—4-H Club—was formally adopted for Canada by the Canadian Council on Boys' and Girls' Work, at its annual meeting in March.

WHAT is said to be a possible substitute for meat was recently shipped in powder form to a Toronto distributor for consumer sampling. It has no name, as yet, and is not on the market. It is prepared by adding water and cooking for 45 minutes. Said to be filling and to have a good meat flavor, it would sell for less than half the price of hamburger.

THE dangerous foot-and-mouth disease is currently present in all countries of the world except Canada, United States, New Zealand, Australia, Ireland and Scotland. A recent outbreak occurred in Switzerland, apparently introduced by a shipment of potatoes, either carrying particles of infected soil, or shipped in contaminated sacks.

## NOBLE MODEL M



the cultivator that gives

## Outstanding Performance

IN CHANGING SOIL-CONDITIONS

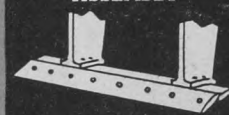
Designed to handle ALL SOIL CONDITIONS easily, Noble Cultivator attachments can be supplied for any soil condition. No cultivator without attachments can suit all conditions. Even where a plow will not penetrate, as for after-harvest work in certain dry baked soils, the Noble straight blade attachment will usually penetrate and work satisfactorily.

For weeding and second stroke summerfallow work the weeder blade is readily interchangeable, going on the same frog as the regular shovel blade. This weeder assures a better weed kill than the ordinary blade and should be used wherever the ground is sufficiently loose that it will penetrate. It clears through, penetrates and withstands rocks where the ordinary rod weeder will not.

The Model M shown above is very popular for use with Noble squadron hitches, from two to seven in a unit, for large power.

Write for information, stating your soil type and tractor power.

### STRAIGHT BLADE ASSEMBLY



For better penetration in extremely hard ground. For extra deep work.

### 100° SHOVEL



Best for reasonably firm soils and most ordinary conditions.

### 75° SHOVEL



For sandy soils and very loose-textured black soils, particularly where grassy patches occur.

### WEEDER BLADE

100° or 75°



For all weeding and summerfallow work after the ground has first been loosened by the regular blade. Fits on the same frog as the regular blade.

Fifteen years' experience under all field conditions is behind this cultivator. We welcome comparison in field tests with any other tillage equipment.

## NOBLE CULTIVATORS

Manufacturing Division of Noble Farms Limited  
Phone 22 or 30 NOBLEFORD, Alberta, Canada



## HOT, TIRED FEET?

Soothe them quickly and effectively. Get fast-drying Minard's Liniment—rub it on. Feel the coolness—get relief, quick!

# MINARD'S

"KING OF PAIN"

# MINIMENT



# Speed Up Your Harvest

with your own  
**MCCORMICK COMBINE**



**HANDLES ALL  
THRESHABLE CROPS,  
INCLUDING:**

Grass Seeds, Legume  
Seeds, Beans (Edible  
and Soybeans), Field  
Peas, Small Grains.

The 12-foot McCormick No. 122-C Combine doing a fast, clean threshing job. One-man operated from the tractor seat — hydraulic platform control — 6-cylinder self-starting engine are among its many advantages.

When you own a McCormick Combine you are master of your own harvests, from grain in summer to grass seed and soybeans in the fall. You move right into the field when conditions are right, and *you bring the crop in fast.*

Sitting comfortably on your Farmall H or M tractor seat you're the whole harvest crew. With a fingertip touch you adjust the combine platform to the cutting height you want. Then set your throttle and thresh grain, seed crops, peas or soybeans. Want to save the straw? Just set your platform down to binder height. Want to combine from the windrow? Add a pickup attachment and use the McCormick 120 Windrower, available in 12- and

15-foot sizes — or the McCormick No. 8, an 8-foot windrower.



The McCormick 12-foot No. 125 SPV self-propelled combine unloading its 50-bushel grain tank on-the-go. The 6-foot No. 62 is another combine in the complete McCormick line.

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## INTERNATIONAL

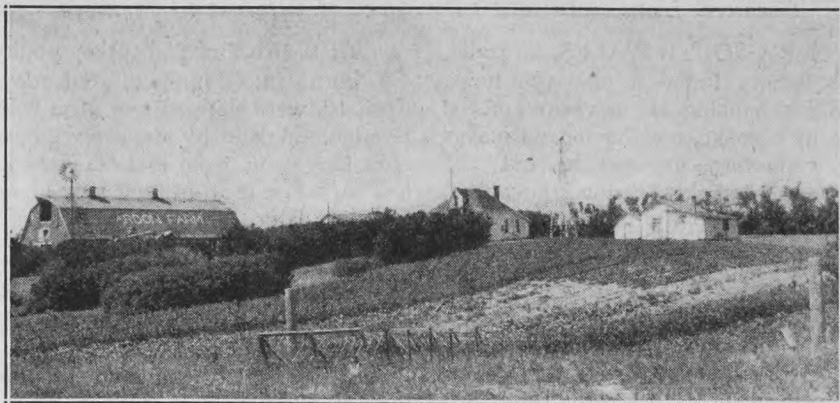


## HARVESTER

INTERNATIONAL HARVESTER COMPANY OF CANADA, LIMITED • HAMILTON, ONTARIO

Your IH Dealer  
is the man to see

## LIVESTOCK



The John Finell farmstead south of Ponteix, Sask., where farming and ranching are combined.

### A Farm-Ranch Combination

*Much rough land and little rainfall makes this family unit a family proposition*

**S**WEDISH-BORN John Finell says that all the best land was gone by the time that he got to Canada in 1913. This was in answer to my question as to why he settled among the rough, rolling hills southwest of Ponteix in southwestern Saskatchewan. Judging by the fine buildings and particularly by the appearance of his big red barn, which by some standards would be called huge, I didn't think he had much cause to be dissatisfied.

Mr. Finell was not at home when I finally located his farm. I was told that he was attending the regional health meeting at Gull Lake. This was somewhat off the route I had planned, but I felt I ought to see the man who had built a barn as big as that down among those hills, so I went to the health meeting, too.

Like so many other good Swedish people in Canada, Mr. Finell came to this country from Minnesota. He came from Sweden at the age of 17 but spent considerable time in Minnesota before homesteading in Saskatchewan. Today he farms two-and-a-half sections, including some land belonging to his two sons: Eldon, who farms north of the home farm; and Arnold, on the home place, who has some additional land of his own. There is, incidentally, a second house on the home place, for Arnold and his family.

The farm consists of about three quarter-sections of pasture and three quarter-sections each of grain and summerfallow, plus about 150 acres of tame hay. He thought that last summer's hay crop would total about 200 tons of tame hay, which on the

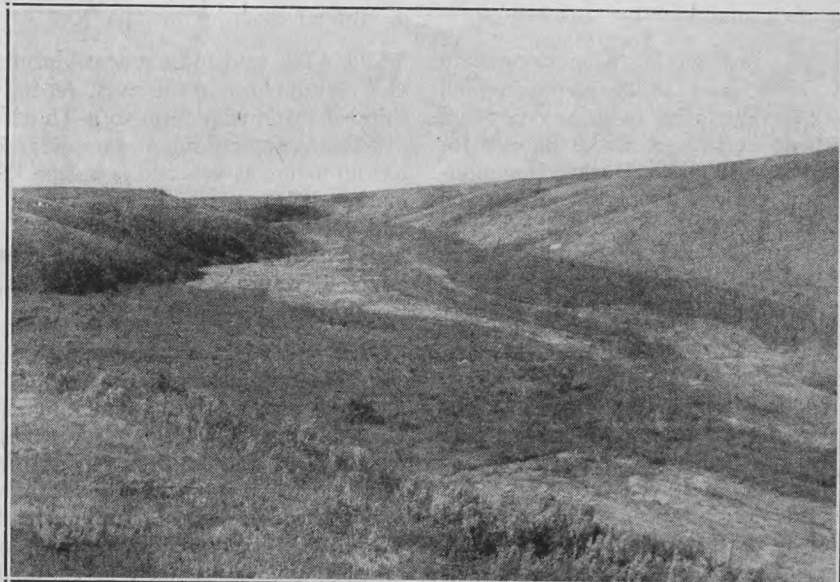
lower land is a mixture of brome and alfalfa, six pounds each, and seeded about 15 pounds per acre. On the drier land he seeds crested wheat grass at about 10 pounds per acre. Alfalfa seems to do well on the farm, and Mr. Finell said that he had some that had been down for 12 years, although he believed it was perhaps better to re-seed every seven or eight years. I was interested to learn that for the last 20 years Mr. Finell has been grassing down the gullies of which there are quite a number on this type of land. For this purpose he uses the mixtures already given.

The farm carries a herd of about 150 head of beef cattle, including approximately 40 registered Aberdeen-Angus, of which half are mature females. The Finells feed out all their own steers and market them mostly as long yearlings. For these they raise all of their own feed and never sell coarse grains off the farm.

There are still about 12 horses on the place, although this number, Mr. Finell says, is too many. There is considerable rough land to till on which it is difficult to use a tractor. At haying also, seven or eight horses are needed.

The only serious weeds are Russian Thistle and French weed, but no spraying, either for weeds or grasshoppers, has yet been done. On the son's farm farther north, poisoning has been done several times, but the home farm is more or less out of the area where the 'hoppers become very numerous.

Summerfallowing is done fairly early, and last year had been gone



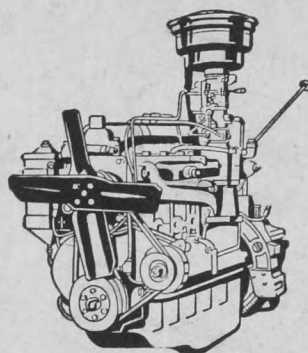
Some of the hay land on the Finell farm.



# IT'S ALL TRUCK!

## 1951

# GMC



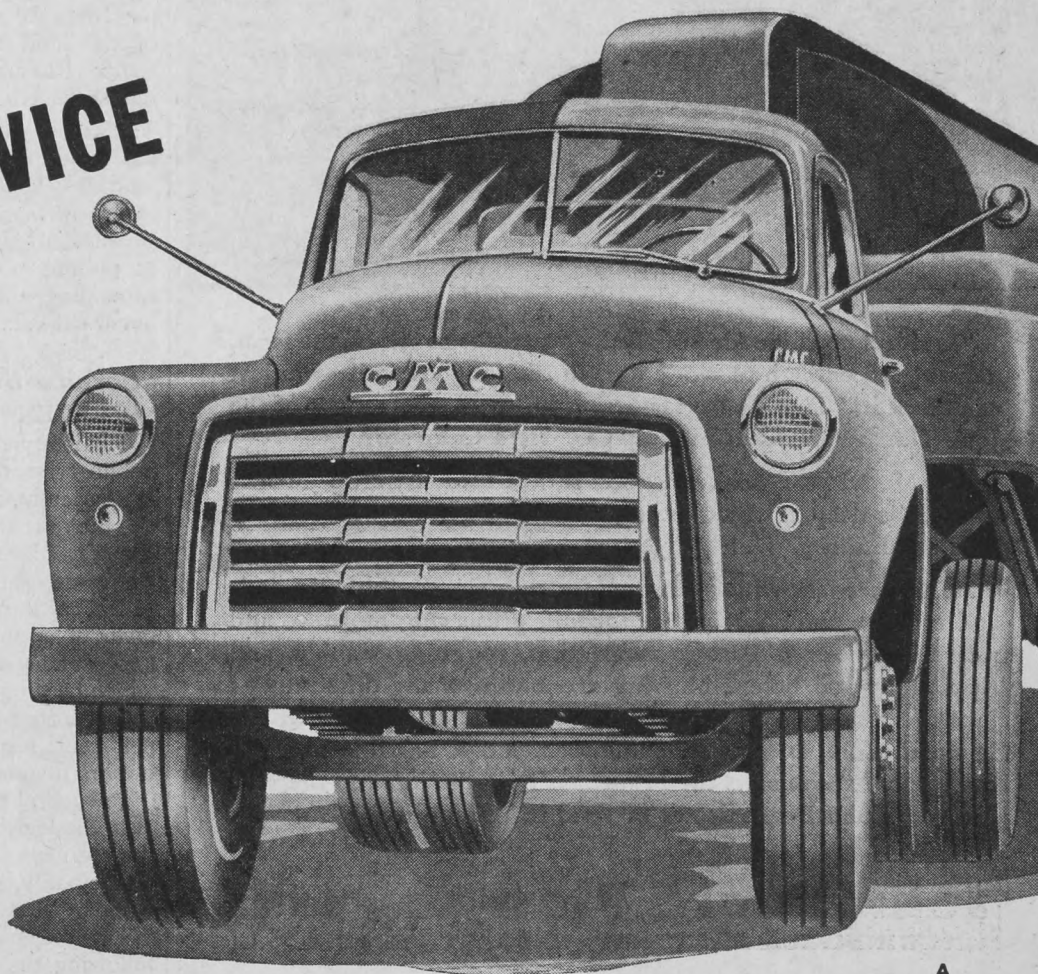
**FOUR HIGH-TORQUE ENGINES!** Ranging in horsepower from 92 to 120, which include the famous Thriftmaster, Torquemaster and Loadmaster engines.

● **TRUCK ENGINEERED**  
**...for TRUCK SERVICE**

Big fleet operators who keep careful checks on all makes of trucks tell us that GMC's are *consistent* standouts for long life with minimum maintenance. *And here's the reason why!* . . . GMC's are truck-engineered by the world's largest exclusive builders of commercial vehicles. *And they're truck-built!* From the very first drawing, they were planned for *truck service—tough truck service.*

GMC gives you real truck engines with high horsepower and higher sustained torque—*more pull!* And GMC's engines . . . the 92 h.p. Thriftmaster, the 105 h.p. Loadmaster, the 114 h.p. Torquemaster and the famous 270 cubic inch displacement engine with 120 horsepower . . . are all built to deliver full power without eating their hearts out!

In the GMC line there are more models than in any other truck line—more load ranges, more wheelbases, more axle designs, more gear ranges—a truck that's *all truck, for any load on any road!* See your GMC Dealer!



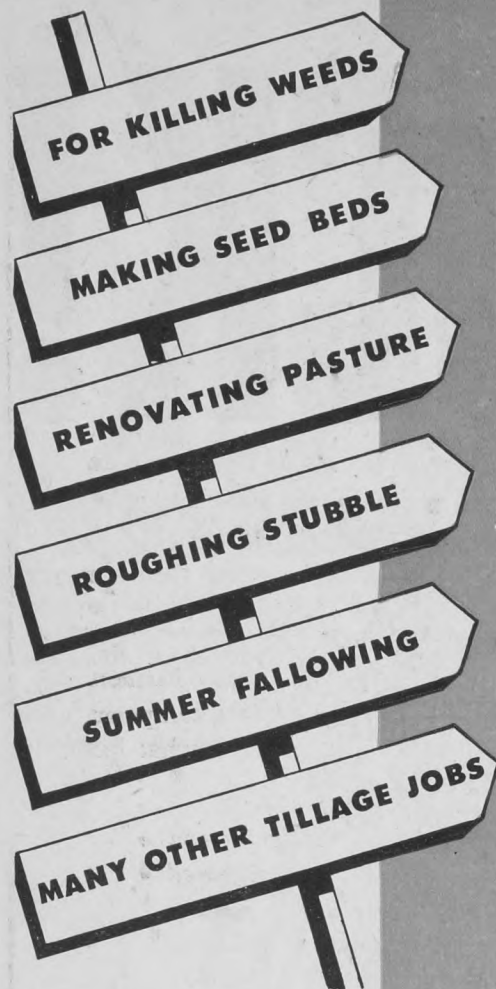
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GENERAL MOTORS  
VALUE

F51-GMC-1

**GMC**

**FOR ANY LOAD ON ANY ROAD**





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A JOHN DEERE-VAN BRUNT

## Model "CC" CULTIVATOR



"An ideal machine for practically every tillage job on the farm, and rugged enough to work well in the toughest soil—you just can't beat it!" That's what farmers from coast to coast say of the John Deere-Van Brunt Model "CC" Field Cultivator.

The Model "CC" makes a good seedbed for any crop—works the soil as deep as eight inches, and digs right in, whatever the field condition.

In summer-fallowing with the Model "CC," you kill all weeds and mix the stubble with the topsoil, preserving moisture and retarding erosion. Pasture renovation, roughing stubble, and ripping up sod before plowing are among many other tillage jobs the Model "CC" will handle better and at less cost to you in time, effort, and machinery investment. A full line of interchangeable shovels fits the Model "CC" to the job and the soil. See your John Deere dealer or send in coupon below for your free folder.

### John Deere Plow Co., Ltd.

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Gentlemen:

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over twice by the end of July. If a fall cultivation is necessary, the duck-foot is used, but otherwise the one-way is the only summerfallow implement. Fortunately soil drifting is not serious. The land is somewhat heavier and does not blow as readily as the soil closer to Ponteix.

The farm contains about 70 acres which it is possible to irrigate from the reservoir in a coulee about a mile from the farmstead. Until the spring of 1950 Mr. Finell had a small dam lower down the coulee, and, more recently built a larger dam, but the spring floods in 1950 tore a hole in it, which was not yet repaired at the time of my visit. It is dry country in southwestern Saskatchewan, and the more water that can be conserved, the better off everybody is. Mr. Finell said that his district had received P.F.A.A. assistance in every year but one since 1944.

Two other products of the farm deserve special mention. The first was a group of three small, but bright and lively grandchildren. These helped me to the second, which was a drink of the clearest, coldest, most excellent water I had had in a long time. A very fine gift, indeed, on a hot day.—H.S.F.

### Sheep Land

THE Saskatchewan Minister of Agriculture, Hon. I. C. Nollett recently announced that his department was encouraging sheepmen to make use of about 16,000 acres of unoccupied land near the Alberta border, northwest of Mantario.

Most of this acreage is in natural grass though some of it was cultivated at one time, but has been abandoned for 15 to 20 years. About two-thirds of the land is administered by the Land Utilization Board, and the remainder is Crown Land.

It is not all in a single block, but has some intervening privately owned land. It is believed to be more suitable for sheep than for cattle owing to the expense of fencing, but lamb and wool at present prices appear to warrant expanding the sheep industry in Saskatchewan.

### Service Boards and Bang's

A RECENT statement by Dr. A. E. Ballantyne, Director of Veterinary Services for the Alberta Department of Agriculture, reports keen interest in the organization of Brucellosis (Bang's disease) restricted areas. These are established when two-thirds of the cattle owners sign a petition in favor of applying the legislation. In two municipal districts in Alberta, which became restricted areas in 1950, it is reported that 95 per cent and 90 per cent respectively of the cattle owners favored the area plan.

In each of these two municipalities, also, the legislation is administered by the Agricultural Service Board of the municipality, the vaccinations being done by local veterinarians.

Dr. Ballantyne believes that by following the restricted area plan for several years, municipalities will be able to drastically reduce financial loss to cattlemen and build up Bang's-resistant herds. The procedure under the legislation is simply outlined by Dr. Ballantyne as follows:

1. All heifer calves will be vaccinated for five or six years or longer, to be followed by a blood test to remove remaining infected animals.

2. Blood testing of cattle is not compulsory, but if reactors are found on private test they will be branded with a "B" on the jaw. This will prevent sale of infected animals to unsuspecting buyers.

3. There will be control over auction sales and community pastures, both of which are quite often factors in the spread of Bang's disease.

4. Milk from infected herds must be pasteurized before being sold for human consumption. This is important in preventing cases of undulant fever.

It is reported that additional municipalities are considering adopting this legislation in 1951, and also that "a large number of agricultural service boards will again be carrying on extensive voluntary vaccination campaigns in co-operation with their local veterinarians this year."

### Stilbestrol

THREE groups of ten steers each were put on feed in November, 1949 at Purdue University, Indiana. All steers were fed the same ration, which consisted of corn and cobmeal, molasses feed, clover and timothy hay, cottonseed meal, bonemeal and salt. One group received nothing but this ration, a second was treated with five stilbestrol pills injected into the neck of each animal near the head. The third group each received injection of ten of these pills.

At the end of 140 days the steers were weighed. The lot receiving an injection of 10 pills each averaged 63 pounds more weight than those receiving none, while those receiving five pills weighed an average of 40 pounds more than the untreated lot. In addition, the 10-pill steers ate 106 pounds less of roughage and 52 pounds less of concentrate than the untreated lot. The lot given the lighter dose of stilbestrol consumed more or less proportionately less feed than the untreated lot as well.

Stilbestrol, or diethylstilbestrol, as it is correctly known, is a female hormone. It occurs naturally in the body, and two British scientists have discovered that young succulent grass contains a substance very like, if not identical, with stilbestrol. It is found most plentifully just before the grasses and clovers begin to flower.

Stilbestrol has been fed to lambs with much the same results as with the steers referred to, and it is quite commonly used for fattening cockerels. The United States Pure Food and Drug Act Administration has sanctioned the use of this material for the feeding of cockerels, but not as yet for lambs, cattle and hogs. Should the government finally conclude that it does not harm the resulting food, and sanction its use with other classes of livestock, the way would appear to be open for much more economical production of beef and lamb. The treatment costs about three cents for a lamb, and about 30 cents for a steer.

### Dangerous Range Weed

U.S. STOCKMEN on the western ranges are fearful of a comparatively new and poisonous weed known as halogeton, which is said to dominate hundreds of thousands of acres in the states of Utah, Idaho and Nevada. There is also some of this weed in California and Wyoming.

Today, not a single flock of sheep can be seen in the Raft River Valley,



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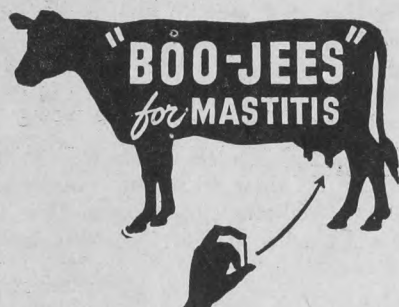
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veterinary  
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## ALOX BUILDS BETTER LIVESTOCK

There's no finer treatment for Championship Cattle than ALOX Linseed Oilcake and Meal, rich in phosphorus, calcium and vegetable proteins. ALOX raises animals with sleek, glossy coats and well-meated flanks — championship cattle that bring top-grade prices.

For better, more-lasting paint jobs keep ALOX pure Linseed Oils on hand. ALOX Raw Linseed Oil is ideal for medicinal purposes, too.



**THE ALBERTA LINSEED OIL CO.  
LIMITED  
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where a number of sheepmen have been forced to go completely out of business, and where on one occasion, about five years ago, a band of 1,300 ewes were poisoned and killed within a day and a half after being driven down from the hills onto the Raft River Flats.

This weed was first found in Nevada about 15 years ago, and is a close relative to the Russian Thistle, to which it bears a striking resemblance. The main difference between the two is that halogeton has a hairlike growth at the tips of the leaves. The weed seeds very freely and up to 360 seedlings have been counted in a square foot. It blooms freely and has pearly red flowers. Late fall is the most dangerous time, because the oxalic acid which is the poisonous agent in the plant, increases as the plant grows, and may reach as high as 20 per cent in the dried plants.

There appear to be no records of any sheep having been saved once they have eaten the weed, of which 250 grams will kill a 100-pound ewe. A few cattle have been killed, but generally cows do not die, although it is reported that after eating halogeton cows will never get fat again, or raise calves. A big outdoor laboratory has been established by the University of Idaho for the study of halogeton. Plots are scattered over an area of 1,500 square miles.

The Experimental Station at Lethbridge reports that halogeton has not been reported in Alberta as yet, nor in Montana, although it has been found in northwestern Wyoming.

"None of the present methods of weed control," says the Station, "have been found practicable for the control of halogeton, as the weed does not take hold on good native or seeded pasture land. Any means that will maintain or improve the natural grass cover will help control losses. Stock that are not receiving sufficient salt are more apt to eat quantities of halogeton, therefore an adequate salt supply will likely prevent stock from overindulgence of the weed."

It adds that one and a half pounds of green plant is considered a killing dose for a mature sheep, and that the only known symptom of the poison is a difficulty in breathing. Fortunately the poison is not cumulative, and small quantities may be consumed day after day with no lasting ill effects.

### 1951 Annuals

ONCE again the well-known livestock annuals of the Farming News and the Scottish Farmer are here. Strangely enough they are available at the same price despite rising prices for almost everything else. Mail your order right away for one or both annuals and enclose \$1.00 each, which includes the postage. Orders will be filled in the order in which they are received.

A few copies remain of the 1950 edition of each of these annuals, and are available at the same price, \$1.00 each, postpaid.

A Country Guide Stallion Record Book is indispensable equipment where a stallion is kept in service. Price \$1.00 each, postpaid.

Address all orders to Book Department, The Country Guide, 290 Vaughan Street, Winnipeg, Manitoba.

a message to all

# Dairy Farmers

**THE DAIRY FOODS SERVICE BUREAU** — the advertising and sales promotion division of the Dairy Farmers of Canada — is now completing its first sales campaign directed to the Canadian public. This briefly is what has taken place.

*From its beginning on Dec. 1, up to the end of May—2,688 advertisements have appeared in daily and weekly newspapers across Canada. 20 full colour advertisements have appeared in widely read national magazines. 28 Trade advertisements have been directed to Bakeries, Hotels, Restaurants and Soda Fountains.*

*Radio, too, has carried 2,860 messages about dairy foods. 11 key radio stations talk to housewives at strategic times urging them to include dairy foods in the daily menu. In addition, 105 broadcasts of the ten-minute daily program "Mary Garden's Market Basket" have been made.*

*A highly efficient recipe service has been maintained to Food Editors of the 60 most important publications across Canada... and a retail merchandising program has initiated special displays and promotions in stores.*

**WHY ADVERTISE?** It may be said that because of present shortages, no further effort is necessary. But just as you invest in good stock and good husbandry to build your herd, so the present campaign must be continued if it is to maintain and advance the preference for dairy foods in today's highly competitive market.

**SUPPORT the "set-aside" campaign** for the promotion of dairy foods in 1951. The ball is rolling. The cent a pound butter-fat advertising "set-aside" in June will keep it rolling. It will protect your future position as a Dairy Farmer in the food market both now and in the years to come.

## DAIRY FARMERS OF CANADA

409 HURON ST.

TORONTO ONT.





ASK YOUR B.F.G. DEALER TO SHOW YOU HOW

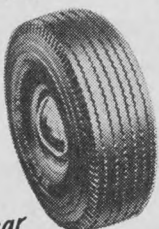
# B.F. Goodrich TRACTOR TIRES WITH



Put  
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**TESTS** prove that B.F.G.'s new Power-Curve Cleats give *terrific* traction at all times.

Power-Curve cleats are higher in the centre, hard nosed for quick penetration, and their power-curve prevents buckling or bending. The tread is the open centre type designed to clean itself as you ride. Easy riding, easy on your tractor, and your fuel bill.

Specify **B.F.G. Super-Hi-Cleat Tires** for your new tractor. They have what you want!



**B.F.G.'S ARE THE BEST  
TIRES ON EARTH FOR  
EVERY ROLLING WHEEL  
ON THE FARM**

51-51

## B.F. Goodrich

TRACTOR & FARM IMPLEMENT TIRES

## Whiteface Chief

Continued from page 15

ribbons and other awards testify to the greatness of the Edgar Herefords.

How a man can operate a 2,560-acre grain and purebred stock farm and still find time and energy to tackle the numerous breeds association and community tasks has never ceased to puzzle his friends and neighbors.

"Some days I get tired just watching him go," one neighbor said.

He has been a member of the Little Red Deer school board for 26 years. He served for ten years on the municipal council, eight of them as reeve. He was district governor for Montana-Alberta district, Lions International. He has been leader of the Innisfail Calf club for 13 years.

During that time, teams from the club have won provincial honors on three occasions, and on two occasions teams have won the Canadian championship. His daughter Jean was a member of one of the teams which won national honors.

He has been president of the Alberta Cattle Breeders Association, president of the Alberta Hereford Breeders Association, president of the Central Alberta Hereford Breeders Association, and is the 1951 president of the Canadian Hereford Association.

An ex-serviceman of World War I, he was president of the Innisfail and District Salvage campaign during World War II, and he has been president of the Innisfail and District War Memorial Society since its inception.

This society has already constructed a community swimming pool, and this year with the assistance of the Lions Club and the Canadian Legion, Innisfail is to have a brand new hockey and curling arena.

Wilf Edgar also has excelled in two different fields of sport. As a curler, he has few equals. He has been a member of numerous outstanding teams and last year he accompanied the Canadian team to Great Britain where he appeared in all the competitive games.

When he wants to ice a rink, he doesn't have to go beyond his own

doorstep. His three sons, William, Robert and George are proficient curlers.

Wilf Edgar also is a crack rifle shot. He was a member of the Alberta rifle team on two occasions when gunning for national honors at Ottawa. He was a member of the Alberta team which won the Canadian title in 1935.

**T**HERE was just one field of endeavor which Wilf Edgar attempted to crash and failed, and that field was provincial politics.

Back in 1943, Alberta was in the throes of another political campaign. The Innisfail seat in the provincial legislature was vacant and three parties, Social Credit, Independent and C.C.F. were concentrating on the constituency.

The Independents selected Wilf Edgar as their candidate and the Social Creditors chose David Ure, a school teacher and part-time livestock auctioneer.

The C.C.F. nominated a resident of Red Deer. At that time the C.C.F. bogey was at its height, and Edgar's strategy committee concentrated their heavy guns on the C.C.F. candidate. They practically blasted the poor man into political oblivion but when the votes were counted it was found that the Social Credit candidate had captured the seat, Edgar was second and the C.C.F. candidate was a poor third.

"I was just overmatched," said Edgar with a grin, when asked to comment on his defeat.

Mr. Ure later was elevated to the post of minister of agriculture, a post which he is discharging with dignity and efficiency, and Wilf Edgar was one of the first to admit that the voters had made a good choice.

When Wilf Edgar walks into the judging ring at Cambridge, England on July 4, he will take with him a wealth of experience both as a breeder and as a judge. He has judged Canadian Herefords on numerous occasions and in 1949 he judged the breed at the Canadian National Exhibition at Toronto. He'll "tie" them as he sees them and that is all that can be expected of any judge.



[Guide photo

Lionel Moore, Canadian Broadcasting Corporation farm commentator, broadcasting to the prairies from the Brandon Winter Fair. The CBC has eight farm commentators in Canada, and three supervisors in the Toronto office. These supervisors direct the Farm Radio Forum, and the programs known as the Prairie Gardener and Summerfallow. The latter is now directed by Peter Whittall, well known as a commentator in the prairie region. Peter left the prairies to go to Toronto some months ago. He was succeeded by Bob Knowles.



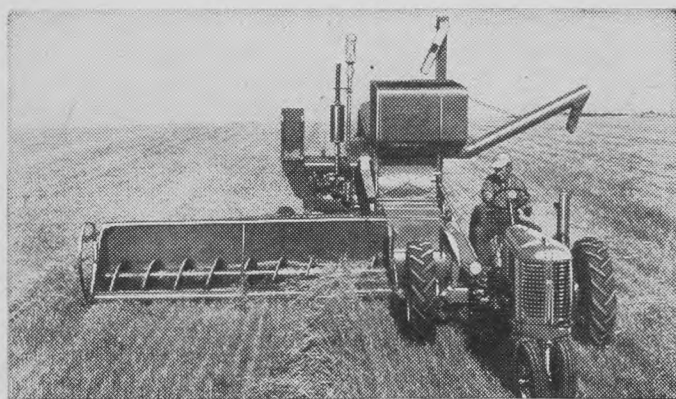
# "FINEST AND FASTEST MACHINE I EVER OWNED"



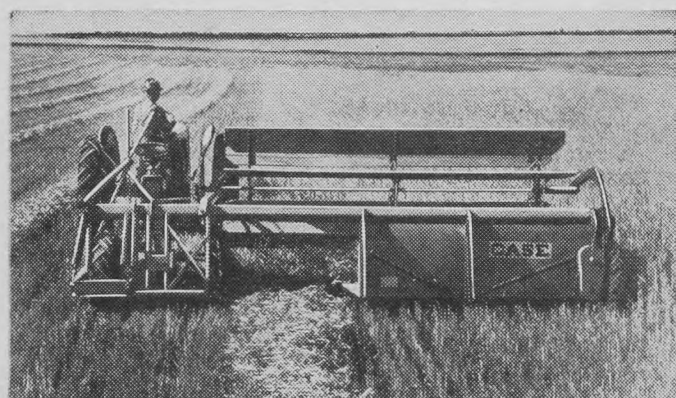
## CASE SELF-PROPELLED COMBINE

"I combined 1600 bushels of wheat a day with my 12-foot Case Self-Propelled Combine," says Frank Klentz. "This is more than 200 bushels per hour in wheat yielding 25-30 bushels per acre."

"Here are the features I like: The Case rub-bar cylinder has the right speed for fast work. Concaves are easy to adjust. The straw rack has plenty of length and stretches out the straw for complete separation. There's nothing to setting the sieves and the wind blast to deliver clean grain to the bin. The hydraulic header is easy to work to get the right cutting height, and it only takes 3 minutes to stop and unload the big 45-bushel grain bin."



**Big capacity Case Pull-Type Combines.** For the man who is looking for fast, grain-saving harvest of big acreages but wants to hold down his investment in machinery. Choice of 9 and 12-foot cuts.



**Fast-curing windrows** with Case Windrower. Cuts clean 12-foot swath; places swath on top of standing stubble away from wheel marks for quicker drying, cleaner pick-up.

## CASE COMBINES FOR ALL ACREAGES, ALL CROPS

Case pull-type combines include models with 5, 6, 9 and 12-foot cutting widths. Self-propelled combines for cutting 9 and 12-foot widths. Pick-up attachments available for all sizes.



## SEND FOR LATEST CATALOGS, FREE

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Prices include transportation, hotel accommodation,  
sightseeing tours.

G-1-51

# GREYHOUND

## FIELD



[Lethbridge Exper. St'n. Photo]

One of the alfalfa fields at Lethbridge in the ten-year rotation. Note the effect (right) of 100 lbs. of ammonium phosphate, on color and the control of dandelions.

## A Soil Fertility Story

Forty years of one rotation on the same soil  
prove that fertility can be maintained

by A. E. PALMER

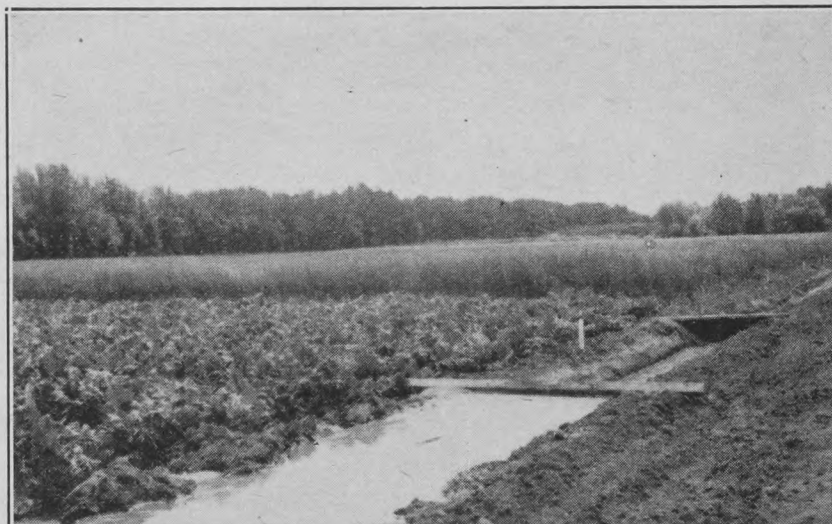
AS the agriculture of our West grows older, we see signs of soil depletion. Fields here and there are not yielding as well as they did in years gone by. The question naturally arises, "Can we restore these depleted fields and maintain the productive power of our soils?" Those who are studying the matter, answer with an emphatic "yes." This conclusion is based on the results obtained on farms and experimental stations where production continues to stay at high levels.

The Dominion Experimental Station at Lethbridge, Alberta, has some interesting evidence that it is possible, not only to restore fertility, but to maintain and even to increase yields over those received from virgin soils. Rotations were established on the Station in 1912 and have been continued to the present. One irrigated rotation shows very graphically how fertility influences crop production and how it may be reduced, restored or maintained. Irrigation has permitted the control of moisture conditions so that yield changes may be attributed largely to soil fertility.

The crops in this ten-year rotation are: six years of alfalfa, one year each of oats, barley, a cultivated crop (now sugar beets), and wheat, with alfalfa seeded with the wheat. From 1912 to 1942, 12 tons of good barnyard manure were applied as a top dressing

on the second-year alfalfa field. No chemical fertilizer was used until 1933. For that year, and every year since, applications of 100 pounds of ammonium phosphate (11-48-0) have been made on one-half of each field, to the sugar beets at time of seeding, and as top dressings to the first and fourth years of alfalfa. This means that each field of the rotation received 12 tons of barnyard manure and one-half of each field received 300 pounds of ammonium phosphate once every ten years. In 1942 the amount of barnyard manure was increased from 12 tons to 30 tons, and put on in two applications, 15 tons plowed under in the fall preceding the sugar beet crop, and 15 tons applied as a top dressing on the second year of alfalfa.

THE yield data from these fields are very interesting as they indicate how fertility may be depleted and how it may be restored. For the first 13 years the yields remained about the same. Then spots appeared in the alfalfa fields where the crop was poor and dandelions outgrew the alfalfa. These spots enlarged each year, and by 1932, the fields with the fourth, fifth and sixth years of the alfalfa crop were yellow with dandelions and yields had dropped from 4.64 tons in 1914, to 1.97 tons of hay per acre. In 1933, as previously stated, 100 pounds of ammonium phosphate (11-48-0)



Foreground: irrigating sugar beets in the ten-year rotation. Background: oats in 1950 that yielded 150.5 bu. per acre.

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were applied to one-half of the first-year and the fourth-year alfalfa fields.

The results were startling. The fifth year alfalfa that received the phosphate in 1933 grew vigorously in 1934, overshadowed the dandelion and produced a yield of 4.73 tons per acre of good hay, while the unfertilized part of the same field yielded only 2.83 tons, which was more than half dandelion. After the use of phosphate fertilizer was adopted, the alfalfa gradually increased in production. In the five-year period 1933-1937, the average yield was 3.48 tons, but for the years 1938-1942 it was 4.36 tons. This was slightly higher than the 4.19-ton yield in the first five years of the rotation. Since 1942, 30 tons of manure have been applied instead of 12 tons that were used previously, and in 1950 the alfalfa yield was 4.59 tons per acre, where both barnyard manure and phosphate were used.

Such is the alfalfa story. But what about grain? Neither wheat, oats, nor barley have shown the phosphate deficiency that was noted with alfalfa. On the fields where no phosphate was applied, the yields of all three grain crops have remained about on the same level for the entire 40 years of the experiment. Therefore, it is evident that the legume alfalfa and the barnyard manure used in the rotation have maintained the grain-producing ability of the soil. However, phosphate fertilizers increase grain yields under irrigation on our virgin soils, and it has done the same in the latter years in this rotation.

It may be said, then, that yields have been well maintained for 40 years in this rotation. In fact, there is evidence that they are gradually increasing where barnyard manure and phosphate are added to the soils. Here are the average yields per acre of the various crops for five years in the early history of the rotation, 1913 to 1917, and the corresponding yields for the last five years:

Crop	Average Yields	
	1913-17	1946-50
Wheat (bu.)	52.4	55.6
Oats (bu.)	98.8	101.7
Barley (bu.)	45.2	79.9
Alfalfa (tons)	3.2	4.3
Sugar Beets (tons)		20.2

In 1950 the yield of oats was 150.5 bushels per acre. Sugar beets were not grown in the early years of the rotation.

In this rotation we have an example of maintaining or improving the productive power of the land by growing legumes and using barnyard and mineral fertilizers. In other tests we have maintained the yields of grain in sweet clover and alfalfa rotations without the use of barnyard manure, but have materially increased yields by using barnyard manure and phosphatic fertilizers. Many farmers have done the same. There is ample proof that even in the areas of higher rainfall, or under irrigation, we can maintain good production. It is merely a matter of adopting a proper cropping and fertilizer program that will meet our particular needs.

(NOTE: A. E. Palmer is superintendent of the experimental station at Lethbridge, Alta.—ED.)

#### Making Use of Sloughs

FARM land in nearly all of the prairies is characterized by large numbers of sloughs. These hold run-off water in the spring, remain wet

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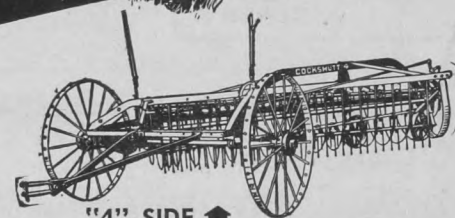
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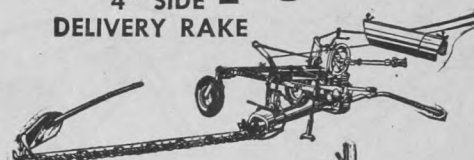
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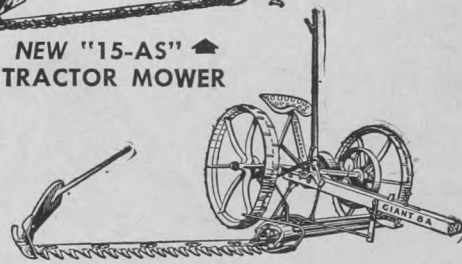
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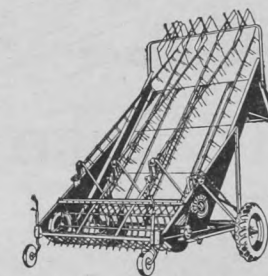
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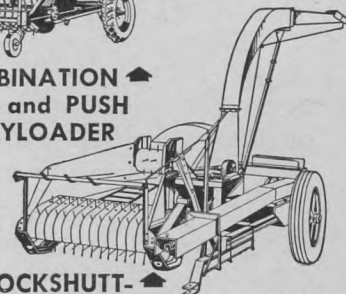
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and useless until after seeding is over, and, on the whole, render quite a large area of land useless each year. In addition, they increase the cost of seeding, tillage and harvesting. Their only value, in many instances, is that some hay may be made from them that is of relatively poor quality, which costs more than it should, because it must be made in small patches.

Many of these sloughs are heavy with alkali, and if too much alkali is present not much can be done with them. If the natural vegetation to be found in them indicates that cultivated grasses will grow, the best plan usually is to seed them down. Many sloughs do not dry up soon enough to permit of seeding a grain crop, though more and more farmers are using some kind of pumping equipment on the smaller sloughs to get rid of the water and at the same time to increase the reserve of moisture in the surrounding soil.

The length of flooding to be expected in a slough will govern the type of forage seed to use. For long flooding—up to nine weeks—reed canary grass is the best; for up to seven weeks, timothy or slender wheat grass; brome up to four weeks; crested wheat grass, or alsike clover, up to three weeks; and no longer than two weeks, alfalfa, sweet clover or red clover.

"It is advisable to plow most sloughs," says the Swift Current Experimental Station, "since this is the most effective way to kill out the native cover. Where this is sparse, one-way or heavy disking may do a satisfactory job. For best results, the slough should be broken up as early in the season as possible. If a seed-bed is prepared in time, it may be seeded to a grain crop, preferably oats. If too late for a grain crop, it can be summerfallowed and seeded to grain crop the following year. The grass should be drilled into a grain crop stubble in late fall just before freeze-up."

### Peace River Pastures

A SERIES of seven pasture mixtures has been recommended for the Peace River region by the Beaverlodge Experimental Station. For general, adequately drained soils with no pronounced hardpan, heavy yields under favorable conditions are secured from six pounds of creeping red fescue, and three pounds each of brome and alfalfa, per acre. A mixture generally preferred on better structured soils, but having a wide adaptation, is six pounds of creeping red fescue and four pounds of alfalfa per acre. For poor structured grey-wooded soils, where hardpan is a problem, or for depleted and light textured soils, a mixture of four pounds each per acre of brome, alfalfa and sweet clover does well.

Ten pounds per acre creeping red fescue seeded alone provides excellent pasture on black and transitional black soils that are well but not excessively drained, and have good physical structure with adequate organic material. This mixture is not recommended for grey-wooded soils, unless in a mixture with a legume. Three pounds each of timothy and alsike clover per acre are recommended for poorly drained areas where moisture is abundant. It is able to withstand some spring flooding, and is generally adaptable to more moist conditions than the mixtures already

given. Two pounds each of alsike and timothy, and three pounds of red top per acre makes a mixture adaptable to low-lying land subject to flooding. The red top will permit this mixture to survive more flooding than the last-named mixture.

Where excessive flooding or excessive moisture is to be met with, eight pounds of reed canary grass per acre will give heavy yields under favorable conditions. This grass is most succulent and nutritious when the forage is immature.

### Grasslands Are Important

D. W. M. MYERS, head, forage crop research, U.S. Department of Agriculture, recently said that there is almost a billion acres of permanent grasslands in the United States, mostly unimproved. He suggested that farmers can double or triple production on hundreds of millions of acres of this land by using such practices as liming, fertilizing, reseeding with more productive grasses and legumes, and good management.

He quoted experiments from different parts of the United States to show that on much permanent grassland, improved forage crops can produce as much livestock feed per acre at lower cost and at less labor, than corn and other feed grains. In North Carolina for example, on land capable of producing 50 bushels of corn per acre, improved pastures produced the feed equivalent of 87 bushels of corn. Wheat gave the feed equivalent of 30 bushels of corn; and oats and barley the feed equivalent of 24 bushels of corn.

Calculated on the basis of the cost of producing the digestible nutrients in 100 pounds of each crop, improved pastures produced 100 pounds for 58 cents, alfalfa for \$1.35, corn for \$1.77 and oats \$2.07. Translated into the returns per man-hour of labor, improved pastures gave a figure of \$23.09, wheat \$5.81, corn \$3.69, and oats \$2.70. Other studies in the mid-western states were reported to have shown similar results.

### Use for Sweet Clover

SWEET clover appears to be hard to establish in southwestern Saskatchewan. It is unwise to seed it in the early fall because the seedlings will not withstand the winter. Late fall seeding does not appear to be successful very often; and good stands, even on summerfallow, are hard to get except in years of unusual moisture. Another difficulty is that with the advent of the sweet clover weevil, many of the young seedlings are eaten down badly. The result is that, at the Swift Current Station, where sweet clover has been tested for a long time, yields over a period of years are considerably less than if a grass-alfalfa mixture is used. In addition, sweet clover does not do nearly as well under irrigation as alfalfa, and is, therefore, pretty well out of the picture under such conditions.

It is recommended that sweet clover can often play a very useful part on alkali areas, because it has a certain amount of alkali tolerance and sometimes does well under such conditions. Slender wheat grass is also alkali tolerant, and if the two are sown as a mixture, feed and pasture



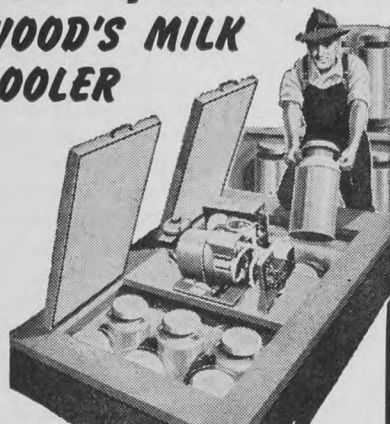
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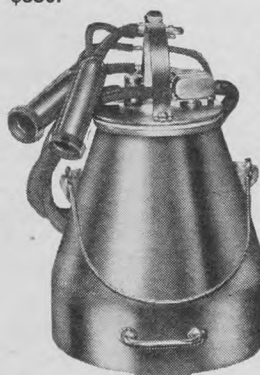
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can frequently be secured from what would otherwise be waste acreage. The yellow-flowered varieties are recommended for this purpose because they set seed close to the ground and are, therefore, more likely to reseed and maintain a stand. Growing sweet clover and plowing it under on alkali areas will often permit such areas to be reclaimed. Sweet clover is a deep-rooted crop, with a large tap root, and, thus better drainage is secured. Repeated cropping to sweet clover may enable other crops to be grown on land that was formerly comparatively useless.

## Avoid Accidents

**F**ARM accidents are more numerous and more serious than one might think. In the United States for example where there are now probably less than 5.5 million farms, there were in 1949, for example, a total of 17,000 farm deaths due to accidents and 1,650,000 injuries. The average days lost per accident varied from 11 to 31, according to type of accident, for 1,927 of these accidents, and the average medical cost per accident ranged from \$19 to \$64.

Agriculture, in fact, ranked third highest in death rate per 100,000 workers, among eight large occupational groups in the U.S. No comparable figures for Canada are readily available, but certainly accidents do occur in large numbers, and it is pertinent to inquire what kind of accidents these are, which happen to farm folk. The chances are that close to three-quarters of all farm accidents happen to males. Falls account for about one in five; about five out of eight farm accidents occur either on the farm or in the farm home, and the remaining three on the highway.

Nearly half of all farm deaths from accidental causes involve mechanical equipment of some kind, automobiles, trucks, tractors and farm machinery. This implies that most accidents occur during the busy seasons, when there is much work to be done and often not quite enough time to do it in.

Carelessness is usually the immediate reason for an accident. Carelessness can be avoided.

## Annual Pasture Crops

**D**URING July and August, pastures usually fail and some supplementary pastures are necessary if milk flow is to be maintained, or gains kept up on market animals. For the drier areas oats and barley are considered to be the most useful, seeded about the last week in May or the first week of June.

Time of seeding is important because the annual pasture crop must be ready for pasturing just when it is needed, which is generally the latter part of July. Seeded around the first of June, oats and barley will have reached the boot stage about the latter part of July. They should not be grazed before the boot stage, by which time the crown roots are well developed and the plants are not so easily pulled out.

Seeding for pasture should be at a heavier rate than for a grain crop, because grazing damages the stand, and the additional seed will ensure a longer pasture period and consequently more production.



# "CUT IT AT THE RIGHT MOMENT"

## The Golden Rule of Harvesting

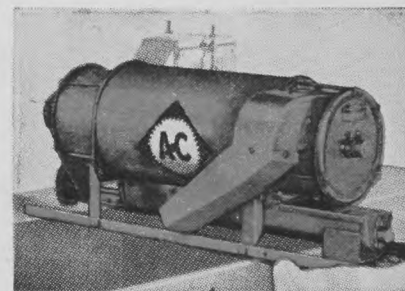
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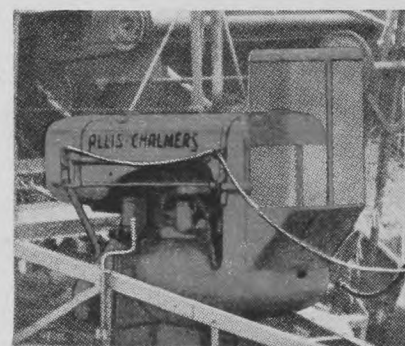
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## Foster Farm

Continued from page 8

oil and locker plant, which in these days of gasoline horses, and much machinery, fills a very real need.

In 1929 he completed a two-year course in the School of Agriculture at the University of Saskatchewan, Saskatoon. This experience, plus his activity in the agricultural society, and the fact that for some years he was an instructor during the winter months under Professor E. A. Hardy in the Department of Agricultural Engineering, at the University, takes him back to Saskatoon each winter during University Farm Week. From this one can surmise, without seeing all of the machinery and equipment on the farm, how his interest in mechanization and the economics of labor-saving equipment has been maintained.

Mr. Foster told me that he got a first-class lesson in economics just after leaving the School of Agriculture in 1929. In that year his father turned over to him five quarters. "The next five years," he said, "were tough going, but they were good experience."



The generous raspberry patch in the garden has its attractions.

Marriage came in 1934, and after that Mrs. Foster took her turn at a tough job. Having been a nurse and originally coming from Leamington in southwestern Ontario where peaches, tobacco, sugar beets and seed corn are typical crops, she had to accustom herself to farming on the prairies. At the same time she found it necessary to make use of her training, by caring for an elderly member of the family during a protracted illness. Economically too, those years from 1934 on were none too good.

IT must be pleasant living on the Foster farm, however. I do not know when the windbreaks were planted and the garden established. The farm house which still looks sturdy, strong and attractive, was built in 1898 and is well graced with trees and pleasant, though unostentatious, surroundings. The garden, in which Mr. Foster takes considerable pride, is somewhat unusual. It is long, fairly narrow, and entirely surrounded by trees, except on the south side. It is clean and carries an abundance of vegetables, flowers and fruit. Mr. Foster has a Waterloo garden tractor, with mower and cultivator, in which he takes considerable pride and pleasure. He took the shovels off of it and put a narrow blade on. "It does a dandy job," he said, "just like a blade weeder."

In 1949 he also purchased a sprinkler irrigation system, including about 600 feet of pipe and a five h.p.

Wisconsin engine. "Now," he said, "I don't need to summerfallow half the garden."

With 200 feet of three-inch pipe, and 400 feet of two-inch, he can get all the water he needs from the dug-out, and use the pump, as well, to empty potholes in the spring and crop the land they occupy. There are some sloughs on the farm but they are too big to empty.

I was taken to see the new house built in 1949, and I don't wonder that all members of the family are proud of it. It represents a lot of careful planning for convenient living, as well as solid comfort. When I saw it, the basement and ground floor were completed, but the top floor was unfinished. Since some of the basement room is used for living, including the children's rumpus room, Mr. Foster wanted it warm and free from draft. Consequently the concrete foundation walls only come about one foot above ground. The distance between the top of the wall and the first floor level is insulated. This makes it possible to have a fully finished playroom for the children, two bedrooms, an oil furnace and a laundry in the basement as well as 10 by 14-foot circular cistern.

The house is served by a pressure water system and has a 14 by 20-foot living room, two bedrooms and two bathrooms on the first floor, as well as a kitchen, which Mrs. Foster must find very convenient indeed. It is fully modern with plenty of cupboards, electric range, refrigerator, ceiling light over the sink and many other small conveniences which I remember seeing but could not describe.

I suspect, too, that Mrs. Foster greatly appreciates the fact that there is little or no heavy moving to be done spring and fall. The house in town is separately furnished, and moving means mostly taking along enough clothes and other personal belongings for a few months' visit.

Isn't farm life grand? I am sure it is for the Fosters, and I am sure too that they deserve it. I wish that all others who deserve it, could have it.

## Predicting Weather

NO farmer in western Canada needs to be told that his success is, to a considerable extent, dependent on the weather. In years gone by we had very little knowledge of the weather that was to come, but today, so successful have the meteorologists been in studying the weather and what causes it, that they can occasionally predict the weather for three or four days to a week in advance. The ordinary ground level observations are now supplemented by balloons which carry automatic weather stations aloft for many miles; radar is able to follow thunderstorms; and airplanes make routine flights well out over the ocean where weather stations are not practicable. More knowledge of the circulation of the earth's atmosphere will enable the meteorologists to predict the weather farther and farther in advance, and it is at least not beyond the range of possibility that the weatherman may eventually be able to tell the farmer what kind of a season lies ahead and whether his harvest will be wet or dry.



## Working Capital

*Farm financing requires study and planning*

NOT long ago a representative of The Country Guide, in conversation with a director and officer of a local co-operative in a first-class district, was surprised to learn that one of the problems which was becoming serious in that co-operative was the increasing number of credit accounts which the co-operatives had been requested by its members to carry for more than thirty days. Similar evidence came from others as to the increasing use now being made of local credit facilities.

A day or so later, conversation with another well-established Saskatchewan farmer turned on the question of the farmers' general welfare and present financial situation. Asked for his opinion about the need for this growing use of credit in the face of the relatively high prices prevailing for farm products, this farmer admitted that farm costs had risen alarmingly, but felt that in many cases farmers, who should be able to meet their current accounts promptly, had been poor planners. "They have spent their available cash for improvements and have not looked ahead far enough," he said. This is probably true in many instances, because farming today is on a different basis from what it was for many, many years. The probability is that a large number of farmers, few of whom keep anything like a respectable set of books, do not realize how much more working capital is required to operate a farm in western Canada today than used to be the case. This increase has occurred not only in the western provinces but all over, including the United States, Great Britain and all progressive and industrialized countries.

An illustration of what has happened comes to hand from Britain, where mechanization has proceeded quite as rapidly in recent years as in Canada, and where the total number of farm tractors, for example, increased from 231,000 in January 1948 to 295,000 in January 1950.

For this and other reasons it is therefore not surprising to learn that, whereas the prewar total of farmers' working capital in the United Kingdom, exclusive of land and buildings, was around 300 to 350 million pounds, the corresponding figure in 1950 is about a billion pounds, exclusive of tenant improvements normally supplied by landowners.

Farmers in western Canada have been fairly prompt generally in keeping abreast of major new developments in implements and other equipment, but there is reason to believe that many farmers have failed to keep abreast of the changing financial requirements that increasing mechanization and comparable advances in other fields have made necessary. The next few months will provide an opportunity to get our thinking straight on this angle of farm operations and to set our sails on a proper course, so as to avoid unnecessary shortage of money with which to carry on until another crop comes in, and also to avoid interference with current operations, by the purchase of more new equipment than the farm finances can well stand.

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## SAVE MOISTURE . . . BOOST YIELDS

**Time and Type of Tillage are Important to Dry Land Agriculture**

Research has indicated that moisture is the limiting factor in dry-land crop production. An average of 10.5" of water is needed to produce a 12-14 bushel per acre crop of wheat. For each additional inch of water 5 to 7 extra bushels may be expected. Since the seasonal rainfall in many of the dry areas is only 6 to 8 inches, moisture must be stored BEFORE the growing season . . . with minimum loss through evaporation or weed growth.

Proper and timely tillage can do a great deal in saving moisture. Tilling should be planned to give complete weed control, with the

after rains. It has been found that the moisture problem is not so much the lack of rainfall . . . but rather the conservation and holding in the soil, greater amounts of the total precipitation. The following table is a striking example of the value of tillage practices on summer fallow.

Results from experiments show that shallow tillage is most effective and least costly, if done at the proper time, and all weed growth is cut by each operation. It has been indicated that too-deep tilling may result in too much moisture being lost through evaporation. Land that is worked 4" deep will permit moisture penetra-

Time of first cultivation . . . further tillage as needed	Water stored in soil	Comparative crop yield next year
All weed growth prevented . . . . . (check field)	5.1"	100%
First cultivation May 15 . . . . .	4.5"	88%
First cultivation June 15 . . . . .	3.6"	78%
First cultivation July 15 . . . . .	1.9"	47%

least amount of soil movement, to minimize loss through evaporation. It should leave a trash cover to prevent soil erosion from wind or water.

A good trash cover permits rainfall to enter the soil readily, and at the same time, prevents puddling

tion just as fast as land worked deeper. The nature and tilth of the soil, and above all . . . the trash cover . . . will influence moisture penetration and storage; more than depth of tillage. Generally speaking, clay soils can store about twice as much water as sandy loam.

### Most Machines Will Do A Good Job

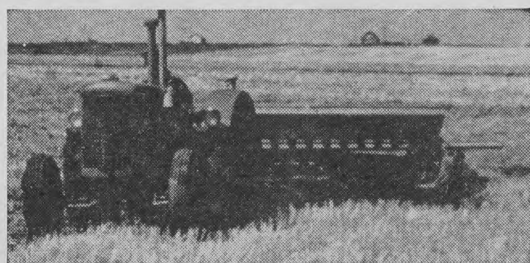
The type of machine used in tilling is not as important as how and when it is used. All implements, in good condition, and properly adjusted and operated, will give a good weed kill. Bear in mind that the job a machine must do is based on: (1) soil type, (2) stubble or trash content, (3) weed growth and, (4) soil moisture.

Select the machine that will give you the best trash cover, under your soil and moisture conditions. Usually, the cultivator or blade-type machine will predominate in the brown soil areas. Blade machines generally leave the stubble standing, to trap the snow and resist wind action. The blade cuts

all root growth and breaks the soil from the roots of the weeds, without ridging the soil. Disc-type machines are at their best when the soil moisture content is high, and when heavy masses of trash or stubble must be worked into the soil. If the stubble is light, there may be danger of burying all the trash, if the disc machine is used more than once. This may result in soil drifting. Generally speaking, the blacker types of soil are more suited for disc machines . . . brown soils for blade or cultivator machines.

### Keep Tillage Speeds Down

In dry soils, high tillage speeds tend to cause pulverization. The right speed of tillage is the one that: (1) kills all weeds, (2) causes the least soil pulverization, (3) leaves a good trash cover.



The value of a good trash cover cannot be over-emphasized.

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**Next issue of Farm Service Facts: Care of Harvest Machines**



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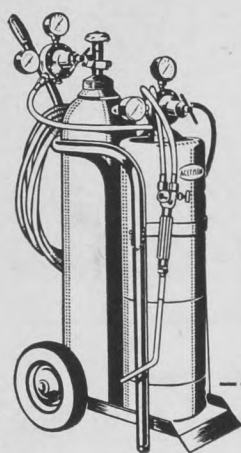
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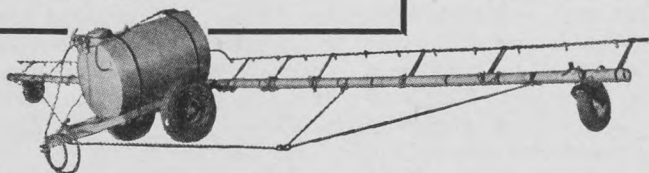
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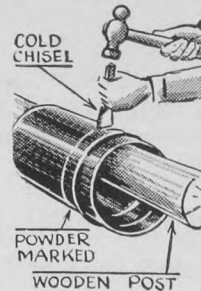
## Workshop in May

A collection of ideas for farmstead and field

### Cutting Stovepipe

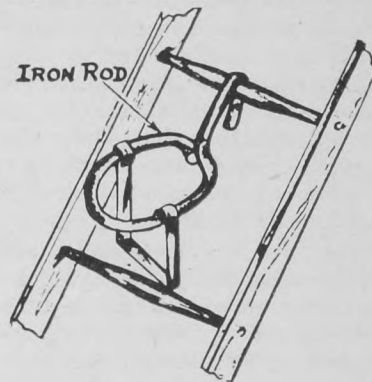
When I wish to cut a down-spout, stovepipe, tin can or other thin metal cylinder, I slip it over a post or pole held in a vise, and mark around it with a string or rubber band dipped in flour, lime or other white material, and snapped at two or three places. Then I cut it out with an old chisel, a sharp cold chisel, or even an old butcher knife struck on the back of the blade with a hammer. It works well and can be used for square chutes by cutting on a square timber.

—I.W.D.



### Paint Can Holder

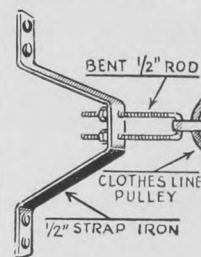
A seven-sixteenth-inch rod, 44 inches long can be bent to form a loop of the proper size to let the paint can slide through easily. A piece of strap iron should be used to make the



bottom and prevent the can from falling through entirely. The hook on the loop should be long enough to allow the can to touch the second rung of the ladder and sit in an upright position. With this arrangement, the paint is always conveniently placed for dipping the brush.—G.F.

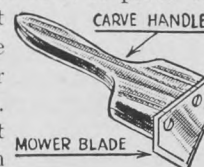
### Clothes Line Tightener

Housewives complain about slack clothes lines and no ready means of tightening them. Bend a piece of strap iron 30 inches long, two inches wide and a half-inch thick, to the shape shown in the sketch. Drill half-inch holes to attach it to the building. Next drill half-inch holes for a 20-inch threaded U-shaped rod. Grease the rod and nuts, or use a rust preventive, to keep the threads from rusting in the hole, and tighten with nuts as desired.—A.P.



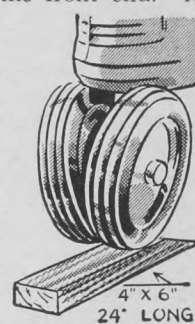
### Handy Garden Weeder

I have used this handy garden weeder for many years, to hoe up close to the plants in the row. A piece of inch board eight inches long, and the width of a mower section, was used. Leave the head at one end the width and size of the mower section, and whittle the other down to a nice round handle. Fasten the mower section onto the head with two screws and you have a weeder that is very convenient.—I.W.D.



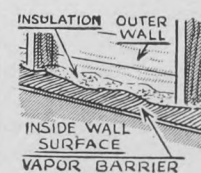
### Tractor Tire Changer

We use this handy idea for changing a flat tire on a row-crop tractor without having to jack up the front end. A block about four inches high, six inches wide and 24 inches long, is placed in front of the other front tire and the tractor driven onto it. It is quicker and safer than a jack. By cutting the approach side of the block at an angle of 45 degrees or more, it will not slide ahead when the tractor is driven on.—I.W.D.



### Holding Fence Posts Down

It is difficult to prevent fence posts from heaving when set in boggy land wet enough that ice can form around them in winter. The first precaution is to use nothing but pressure-creosoted posts, if these can be obtained. An anchor will be necessary for corner posts and this may be a buried "dead man," connected near the top of the post, or an old disk-blade anchor. Ordinary fence posts can be sharpened and set extra deep so that they can be driven back if they lift. They can also be notched or spiked at the bottom, and a large pail of heavy concrete poured in and tamped down before filling the hole.—I.W.D.



### Vapor Barrier

When insulating a poultry house or other building, not everyone knows where to put the tar paper or other vapor barrier to prevent the moisture from working into the insulation and destroying its effectiveness. In homes, poultry and hog houses, stables and other livestock shelters, the inside air is warm and contains excess moisture, which tends to condense as soon as it strikes the cooler air in the insulation. In all such cases, therefore, the vapor barrier ought to be placed between the insulation and the inside air. It is usual to put it on the inside of the studding, and then protect it from mechanical damage by matched sheathing of some kind. If the outside siding is rain and snow proof there is no danger from outside moisture.—I.W.D.

### Calf Feeder Pail

An old bucket with the bail removed, together with a spring and a T-hinge, are all that are needed to make a calf feeder which will keep the calves from tipping over the bucket while feeding. The bucket is fastened to the bottom board with the hinge, and the spring runs from the pail to the upright. The bucket must be large enough so that the feed pail can be set inside it.—A.B.





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## Your Six Pounds

Continued from page 7

everywhere. They have not been confined to Canada and United States, but are common to many countries. The population of the world has grown with great rapidity during the last hundred years, and is now approaching 2.4 billion people. Animal diseases, and the diseases of human beings have been traced to lack of these "trace" elements in Britain, Holland, Australia and New Zealand, and many of the consequences of the deficiency of such minerals have been demonstrated on small laboratory animals such as guinea pigs and white rats, the latter being particularly useful since their reaction to food is similar to that of human beings.

The more we know about quality deficiency in much of the food we eat, the more we find out that there is still much that we do not know. A definite linking up of certain diseases with particular mineral deficiencies is, in all probability, only an earnest of more to come, as science develops further knowledge. "Falling disease" of dairy cattle in Australia, "Peat scour" of dairy cows in New Zealand, and "Swayback" of lambs in Great Britain, have each been traced to copper deficiency.

Where a pasture is deficient in cobalt and contains less than about 0.1 parts per million, cattle get thin, move listlessly and are unable to control the behavior of their legs, while lambs are retarded in growth, become unthrifty and develop dry, lustreless fleeces. Mortality may reach 30 per cent in cases of severe deficiency. In Britain, cobalt deficiency in animals is known as "Pine disease." Lack of iodine, in addition to producing goitres, creates sterility, stillbirths, and in cattle, sometimes monstrosities which are called "bulldog calves." A deficiency of manganese produces several diseases in plants but in animals is most frequently associated with perosis, or slipped tendon in young chicks.

SOME "trace" elements are injurious because of their poisonous effects when too much is present. These include molybdenum, which in England (Somerset) causes a disease known as "Teart," which produces unthriftiness, change of hair color, and scouring, especially of cows in milk. This molybdenum trouble was identified in the inter-lake country of Manitoba by Professor J. M. Brown, of the University of Manitoba in 1948. Another toxic or poisonous "trace" element is fluorine, which is generally spread by the fumes from a factory, or may arise from feeding of fluoride-rich phosphates. This poison affects the teeth and joints principally. Selenium is another toxic mineral which is the cause of the so-called "Alkali disease," resulting in a loss of hair, and changes in the growth of the horn of the hoof.

All of these discoveries, and all of this slowly accumulating evidence points to the close connection between the soil and nutrition. When we speak of nutrition we mean, ultimately, human nutrition, because while some plants and animals are kept for ornament, sport or recreation, most of them are reared for human food. Experiments have been conducted which seem to indicate very clearly that animals have retained an instinct which the human being has lost. This

is the instinct for the right choice of food, if given the opportunity to choose wisely. Human beings, for the most part, are herded together in large centers as a result of the development of urban industry. Probably no single dweller in any Canadian city or large town knows where the food his family eats was produced, whether on brown, dark-brown, black or grey-wooded soils, or whether such soils were well or poorly farmed, in good heart, or deficient in one or more essential minerals. The evidence being accumulated would seem to indicate that in some cases, at least, this indiscriminate purchase of food regardless of quality may be dangerous. In a very excellent article which appeared a year or two ago in The Ladies' Home Journal, Winifred Raushenbush put it this way:

"Poor soils equal sick plants, sick animals, and sick people. In Florida, small patches of land are so miserable that the children, cows and vegetables are all sick. The turnips suffer from iron chlorosis, the cows from salt sickness, and 80 per cent of the children from anemia. Though the sicknesses have different names, they all have the same cause: a soil deficient in iron, cobalt and copper."

BECAUSE research in this field is carried on so much more extensively and rapidly in the United States than in Canada, it is natural that much of our initial information on the relationship between soil and health and plants and animals should come from the United States and other countries. Helpful as this is, however, it is only the principles involved which apply to Canadian soils, people and livestock. The detailed information we need we must obtain for ourselves. The problems involved are many and complex. They are summarized briefly in these remarks by Louis Bromfield, the novelist-turned-farmer, whose Malabar Farm in Ohio, and the books which have emanated from it, have helped to stir up so much interest in this comparatively new and vital field of discovery:

"The relationship of soils and minerals to the health of animals and people becomes even more complicated than that of the relation of these things to the health and resistance to plants... They are complicated by such elements as the functioning of the whole endocrine system, and the specific purposes of the individual glands, by factors of metabolism, by the antibiotics such as penicillin, and the antibodies (serums, vaccines, etc.) as well as the amino acids, the vitamins, the enzymes and hormones, fungi and molds, and the animal secretions contained and operating in well-managed barnyard manures. The final and complete answers to many of the existing mysteries are fundamental and, scientifically speaking, exact, and no amount of quackery, or shortcuts, or improvising, or evasion will solve them."

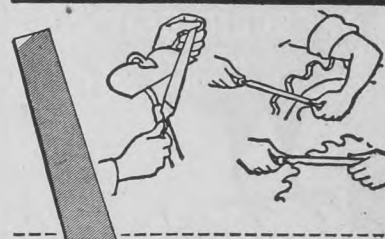
The achievements of modern science have been truly wonderful, but after more than a century of steadily intensifying scientific effort, the expenditure of billions of dollars, and the conscientious work of many thousands of trained researchers, we have been led at last to a realization that we are only on the fringe of a vast new field of potential knowledge which remains yet to be explored.

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## POULTRY



[Guide Photo.]

The incision for caponizing should be one inch long, and between the last and second-last ribs.

## How and Why to Caponize

A profitable practice reviewed by the poultry department head at the University of Manitoba

by G. C. HODGSON

**H**AVE you ever caponized young cockerels? It is not a difficult operation, though to become highly skilled requires considerable practice. An expert will caponize one bird a minute or more, whereas the beginner may spend 20 to 30 minutes per bird.

Recently there has been a considerable increase in the number of capons grown on our western farms. This growth in capon production has accompanied the increasing demand for high quality poultry meat, and will expand still further. These birds are no more difficult to raise than other chickens. The greater deposits of fat throughout the muscles and under the skin not only make capon meat tender and palatable but also qualify the birds for top market grades and the capon premium.

Contrary to popular opinion capons do not grow much larger than cockerels. Up to six months of age there is practically no difference in rate of growth; after that capons grow slowly, put on weight and produce flesh of superior quality. The flesh of capons over a year old deteriorates in quality. Most capons are marketed when between seven and eight months of age.

Although any breed of fowl may be caponized, the general purpose breeds such as Plymouth Rocks, Sussex, New Hampshires and their crosses are most popular. Among the heavy breeds Jersey Black Giants make a fine large capon. The market demand is for capons seven pounds and over.

Vigorous cockerels of high vitality make the most satisfactory capons. On a weight basis, birds for caponizing may vary from three-quarters of a pound to about two pounds or a little more. On an age basis the cockerels may range from four weeks or younger to about ten weeks, depending on the breed and stage of maturity. The operation is best performed when the testes are inactive and small. To successfully operate on small birds requires great skill.

A typical caponizing set contains a knife, a rib-spreader, a combined hook and probe, a remover and two cords fitted with wire hooks. Other desirable equipment consists of a shallow pan containing a weak disinfecting solution, absorbent cotton and an operating board.

A home-made operating board may be constructed from two pieces of 12-inch dressed lumber each 24 inches long. At three-inch intervals drive 2½-inch finishing nails into both edges of one board, allowing the nails to project one inch. Hinge the boards at one end. A brick or block of wood is placed near the hinged crotch. The board with the projecting nails may thus be elevated to any desired angle. It is on this board that the caponizing takes place. Set it on a table, upturned barrel or box of convenient height.

Keep the cockerels to be caponized without food for 24 hours and without water for 12 hours immediately preceding the operation. This starvation period does the birds no harm. It empties the intestinal tract, shrinks the testes, slows the blood circulation and reduces bleeding, all of which is necessary for an easy and successful removal of the testes.

Conduct the operation out-of-doors under natural light, where the sun will shine over the shoulder of the operator. Secure the legs and wings of the cockerel with the cords. Fasten a weight to the free end of each cord. Loop the leg cord over a projecting nail near the lower corner of the board and loop the wing cord over a nail near the opposite upper corner. The weights are allowed to hang free causing the bird to be stretched across the board with its breast toward the operator. Thus restrained, a bird will remain motionless on its side throughout the operation.

Pluck the feathers over the ribs adjacent to the hip. Sponge the exposed skin with absorbent cotton soaked in weak disinfecting solution. With the left hand tighten the skin over the ribs by drawing it toward the hip, at the same time locating the last two ribs with the left forefinger. Hold the knife in the right hand and, following the curvature of the ribs, make a one-inch incision between the last and the second-last ribs, commencing one-half to three-quarters of an inch below the backbone. Do not cut across the ribs.

**T**HE spreader is next placed in the incision, with the handle away from the operator. Spread the opening about one-half inch. Puncture and tear with the hook the transparent

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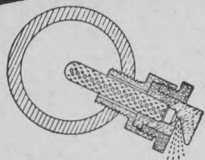
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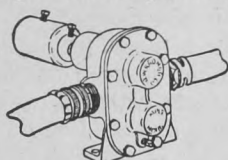


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membrane now in view. The upper testicle is visible near the backbone, just below the front of the kidney and to the rear of the lungs. There is considerable variation in the size, shape and color of testicles. Generally, they are about the size and shape of a small bean and greyish-yellow in color. Occasionally partially or completely black testes are observed. This is quite normal and not an indication of disease.

Insert the remover and grasp the testicle firmly. With a slight twisting motion the removers and the testicles are withdrawn from the body cavity. Frequently membranes surrounding the testicle are brought through the incision with the organ. These may be severed.

Remove the rib-spreaders, turn the bird over and repeat the procedure. An experienced operator may remove both testicles from the one side. However, it is easier and more satisfactory for the beginner to operate from both sides.



[Guide photo

*The positioning of the spreaders  
should be noted.*

Air frequently accumulates under the skin of capons within a day or so after the operation. As these "wind puffs" appear pinch the skin together between thumb and forefinger and puncture both surfaces of the skin with a knife blade. Press the inflated areas to force out the air.

If a small piece of testicle remains in the body, the bird will develop the characteristics of a normal male but is useless as a breeder. Such birds are known as "slips" and are marketed as roasters. To avoid "slips" make sure the entire organ is removed.

On completion of the operation place the birds in a floor pen without roosts. Provide them with mash and water for a few days before feeding whole grain. Thereafter feed and manage them as you would a flock of pullets of the same age.

(NOTE: G. C. Hodgson is associate professor of poultry husbandry at the University of Manitoba.—Ed.)

## Poultry Range Shelters

MANY types of range shelters are in use. They provide shelter at low cost, and simplify the problem of caring for a large number of birds under conditions favorable for the production of a healthy flock. They provide ideal roosting quarters for growing stock and for breeders which are being conditioned for the following breeding season.

Range shelters should be so constructed that they can be readily moved to a new location when this



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Read carefully the circular enclosed in the package for best results in the use of this product. Prompt treatment after accurate diagnosis is a key to best results. It is advisable to obtain a laboratory diagnosis, especially in intestinal coccidiosis, coryza, and fowl cholera. Do not hatch eggs laid by hens during medication with sulfas, or for five days thereafter.

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## GILLETT'S FARM HINTS



## PARASITES PROVE COSTLY TO POULTRY FARMERS

### GILLETT'S LYE AMONG BEST PREVENTATIVES

Parasites cut profits in two ways. Mites, lice, and other external parasites cause restlessness which results in slowing up digestion and decrease in growth and productivity. Internal parasites reduce vigour and render birds highly susceptible to disease. And while it is often a long and costly process to get rid of parasites, a clean flock can be kept clean with Gillett's Lye at very small expenditure of time, trouble and expense.

Many leading poultry authorities recommend Gillett's Lye for use on the poultry farm because it is cheap, effective, and also has the double advantage of being both an excellent cleanser as well as a powerful disinfectant. For general cleaning of dirt, droppings, etc., dissolve 3 teaspoons of Gillett's in a gallon of water and apply with a stiff brush. Where parasites are suspected, scrub thoroughly with a solution of 6 teaspoons of Gillett's to a gallon of water — being particularly careful to clean in all cracks and corners. Gillett's disinfects the equipment, destroys worm eggs, greatly reduces the danger of other parasites.



### MITE DISINFECTANT

The following mite disinfectant is recommended. It is very effective and costs little to prepare: Dissolve 1½ lbs. of Lye in as small a quantity of water as possible. Do this 2-3 hours before use, as lye should be cold when used. Put 3 qts. of raw linseed oil into 5-gallon stone crock, and pour in the lye solution very slowly . . . keep stirring

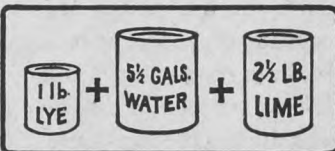
until a smooth, liquid soap is produced. Then gradually add 2 gallons of crude carbolic acid or commercial cresol. Stir until resulting fluid is clear, dark brown. Use 2-3 tablespoons of the mixture to a gallon of water as a spray.

### DANGEROUS POULTRY DISEASES

Lye is recommended as being highly effective against the germs of the following dangerous poultry diseases: Coccidiosis, Laryngotracheitis, Infectious Bronchitis, Pullorum, Fowl Cholera and Bacillary White Diarrhoea of young chicks. Regular cleaning with a solution of 3 teaspoons of Gillett's to a gallon of water is a good preventive against any of the above diseases. Where disease is known to be present, double the solution strength.

### WHITEWASH DISINFECTANT

Dissolve 1 lb. of lye in 5½ gallons of water. To this solution add 2½ lbs. of water-slaked (not air-slaked) lime. Apply as ordinary whitewash. This whitewash both improves appearance of farm buildings and also acts as a long-lasting disin-



fectant — the action of the lime actually prolonging the disinfecting properties of the lye.

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proves necessary. Large shelters are too heavy to move by hand, and must be fitted with skids to facilitate moving them with horses or a tractor. Small shelters can be fitted with handles which will permit two men to carry them, especially if the shelter is built of light materials, and the base is made as a unit separate from the top.

It is a good plan to move shelters a small distance frequently to avoid bare patches and the accumulation of droppings. Water containers and self-feeders should also be moved often for the same reason. Large shelters are frequently placed in the desired position in the spring, and not moved until the following year. When this is done they should be moved a considerable distance to their new location.

The usual practice is to place a slatted floor or fox wire under the roosts to prevent the birds from coming into contact with the droppings. Fox wire has the advantage of encouraging the birds to use the roosts, as they do not like roosting on the wire. Roosting on the ridge of the roof can be discouraged by giving the roof a steep pitch, and by covering it with a hard, smooth material such as hard-pressed, waterproof fibre board which has been painted.

The three common sizes of range shelter are 10 by 12, 9 by 10 and 6 by 8 feet. They will accommodate 200, 150, and 80 pullets respectively. The smallest size finds particular favor with small and medium-sized flock owners, according to Leonard Griesbach, poultry assistant, Dominion Experimental Station, Fredericton, N.B. Chickens can be readily caught, with the aid of a wire catcher, from the door of the shelter. Moreover, chickens seem to prefer roosting in the smaller shelter.

Plans for poultry shelters are available from the Information Service, Canada Department of Agriculture, Ottawa.

### Poultry Pasture

GOOD pasture, properly handled, can save up to 10 pounds of feed per bird during the growing season, according to the Dominion Experimental Station, Lethbridge, Alberta. At present feed prices this represents a worthwhile saving.

Either annual or permanent pastures are typically used for poultry. In deciding what type to use such factors as, yield, adaptability, palatability, nutritional value, and other similar factors must be considered.

Oats are the most widely used and popular annual pasture, though fall rye seeded in the spring, is also popular with poultry producers. These crops should be seeded at a somewhat heavier rate than is used for a grain crop. If crops are seeded at different dates, starting as soon as the soil is dry in the spring, a succession of pastures with good carrying capacities will be available until freeze-up.

Permanent pastures can be legumes, or grasses, or a mixture of both. Alfalfa is by far the best all-around crop for summer pasturage, and if kept cut reasonably close so that the growth does not become rank, it will produce a large amount of nutritious pasture. Orchard grass, brome grass, creeping red fescue and Kentucky blue grass are perhaps the best of the grasses. A grass legume mixture is recommended, because it gives the birds a

variety from which to choose, and if one of the varieties in the mixture should fail it provides insurance that there will still be pasture.

Permanent pastures should not be used oftener than every other year, and preferably once in three years. It is sometimes possible to tie the poultry pasture in with a rotation that will assure clean pasture each year.

### Forced Moulting

AS the hatching season draws toward an end, attention should be given to birds that are to be held over for another season. The flock should be culled carefully, and those birds marketed that are overfat, thin or have already moulted.

To force a moult the birds should be turned out on good range, and all feed and water withheld for about 24 hours. For the next few days about seven pounds of grain per 100 birds should be fed, and water provided only in the mornings. After about a week, production will be practically nil, and moulting will have begun.

When this condition is noted, the amount of grain fed should be increased and supplemented with about one cupful of fish oil for every 100 pounds of grain fed. If the oil and grain are mixed each evening the oil will have an opportunity to thoroughly soak into the grain, before it is fed the next day. Laying mash can be fed after about four weeks. After six weeks the birds should be put on full feed and moved into the laying house.

Forced moulting will often pay very good dividends, advises F. J. Higginson, Acting Poultry Commissioner, Alberta Department of Agriculture.

### Chickens in Town

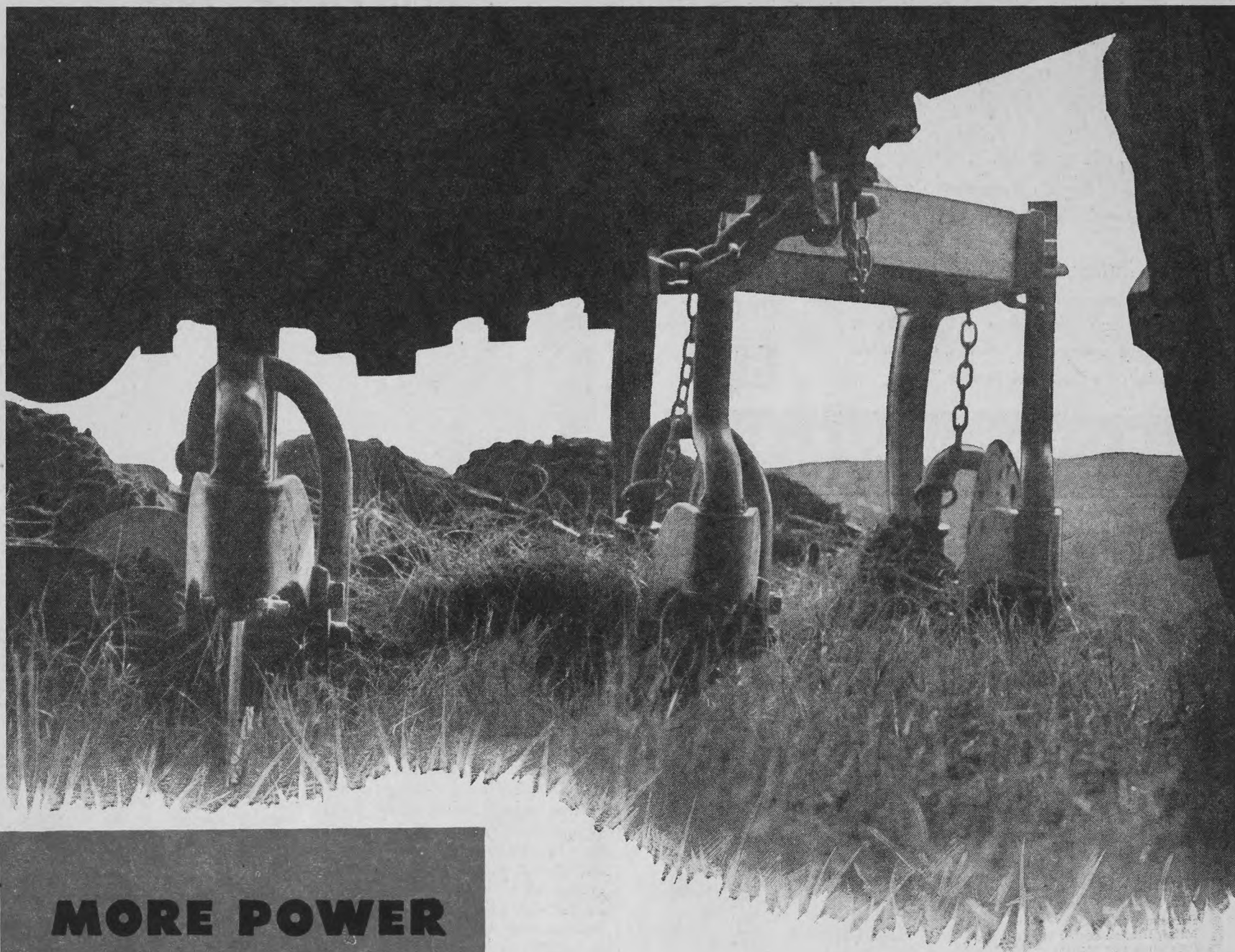
QUITE a few retired farmers and other town dwellers raise a small flock of chickens. The Experimental Farm Service does not recommend raising these birds in the neighbors' gardens. Every comic-strip artist that has taken pen in hand has, at one time or another, depicted an irate neighbor chasing chickens.

A total confinement plan is suggested as a means of avoiding this trouble. The laying hen will do well in total confinement, whether in the common house on the floor, or in a laying battery or cage. A yard plan has been successfully used at the Experimental Station, Scott, Sask., for some years, reports E. Van Nice. The runs are ordinarily alternated to opposite sides of the house each year, so that the idle land may be summer-fallowed or used as a garden.

For urban egg production, pullet chicks may be bought and raised on wire floors, or pullets may be purchased at about five months of age and placed directly into the laying batteries or cages. Broilers have been grown in batteries or pens at the Scott Experimental Station and brought to weights of 2½ lbs. at nine weeks, with a feed consumption of 2½ lbs. per pound of meat produced.

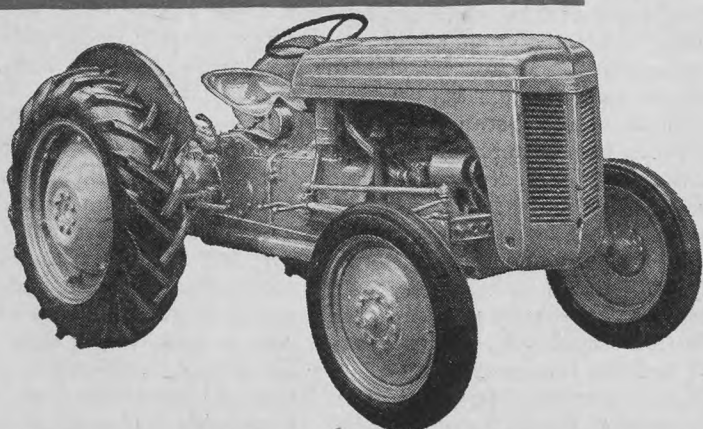
The total confinement method produces eggs and broilers of better flavor than the ranging method. The farmyard hen frequently eats food that affects yolk color and egg flavor. The confined bird is usually raised on commercial feed or concentrate especially prepared for the purpose, and which does not adversely affect the final product.





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**HORTICULTURE**

May is the brightest of the spring months with its bursting beauty so well illustrated by these apple blossoms.

**Balanced Fertility**

A FRUIT tree, bush, or vegetable plant is in much the same relation to the soil it grows in, as a human being is to the cook who arranges the menu and cooks the meals. The human being can fire the cook or discuss the question of a healthful diet with her, but a tree is in no such fortunate position. As human beings, we are often tempted to take foods because we like them, rather than because they are the most healthful. We grow trees, bushes and plants, however, for the volume and quality of the produce they can be made to yield, hence the importance to the fruit or vegetable grower of understanding as much as he can about balancing the fertility of the soil with the needs of the plants being grown.

We know that there are certain elements such as nitrogen, phosphorus and potassium which are most likely to be lacking in soils. We also know that there are other elements such as calcium, magnesium, boron, iron, copper and others, which occasionally are lacking and which may be just as important as the three principal ingredients of plant food.

Man wants apples, for example, which will keep for a long time. Nature is not interested in long-keeping qualities. The sooner the fruit ripens, drops to the ground, and rots, the sooner will the tree be able to reproduce itself through the germination of the seed. Because of these differences, man requires to study the behavior of different crops in order to adjust their natural tendencies, where possible, to his own desires. At the Central Experimental Farm, Ottawa, nutritional studies have shown that if commercial orchardists feed their apple trees too liberally with nitrogen so as to make them grow very vigorously, the resulting crop of fruit is likely to be of shorter keeping quality than where the nitrogen level is not so high. What is true of keeping quality is also true of the quality of the fruit as measured by flavor, texture, color and firmness. Too high a percentage of nitrogen in the foliage tends to reduce fruit quality also.

It is not altogether as simple as this, however, because the extent to which nitrogen in the foliage produces quality, depends somewhat on the relationship between the amount of

nitrogen and the amount of potash present. Increasing amounts of potassium tend to increase quality up to 17,000 parts per million. This is not true of phosphorus, because so far there seems to be no apparent correlation between the levels of phosphorus in the foliage and fruit quality.

When the soil is fertilized with ammonium sulphate (for nitrogen), there is a fairly steady increase of total nitrogen in the foliage, but the increase also seems to bring about a considerable decrease in phosphorus and potassium. At the same time the content of magnesium in the foliage increases. On the other hand when superphosphates were applied as fertilizers, they did not seem to have any consistent effects on the phosphorus or nitrogen content of the foliage. It was noticeable that varieties differed in their apparent ability to handle fertilizers.

These findings illustrate how much remains for us to find out about feeding the plants we grow. A person who grows crops of any kind is not as fortunate in some respects as those who grow livestock. One can feed livestock exactly measured amounts of different kinds, but with plants, one can only proceed on the basis of supplementing stocks of plant food which are already in the soil in undetermined quantities, and in unknown degrees of availability.

**Asparagus**

THE Experimental Station at Saanichton, B.C., wonders why asparagus is not more widely grown, in view of its universal popularity as a spring vegetable. Authorities there conclude that perhaps the principal reason is the reluctance of most persons to wait two or three years from the time of planting until the first cutting. If asparagus roots are grown from seed, the period of waiting will be one or two years longer.

It is pointed out that asparagus culture is not difficult, but care must be taken in the preparation of the soil and the planting. Asparagus is not only a gross feeder, but as a perennial it will provide a bed of plants which will last for many years. This means that plenty of organic matter in the form of manure or compost is necessary before planting, and should be turned under deeply. Plant as early



as possible in the spring at distances of about 18 inches apart in the row and four feet between rows. Most desirable depth is six inches deep in heavier soils and perhaps eight inches deep in light soils, covering the roots only two or three inches at first, and gradually filling to soil level.

No cutting may be safely done in the first or second years after planting. Cutting for only two weeks in the third year, and four weeks in the fourth year, will bring it to its full period of six to eight weeks by the fifth year.

### Clean Out 2,4-D Residue

**D**URING the spring and summer many gardeners will be using 2,4-D on lawns and patches of weeds. After such jobs spray equipment must be thoroughly cleaned. The residue of chemical weed cleaners will injure or kill cultivated plants, if the sprayer is used for DDT or other sprays.

A recommended method of cleaning the spray equipment which is the best yet found by the Saanichton Experimental Station, B.C., is to use one ounce of ammonium nitrate or ammonium sulphate for an Imperial gallon of water (hot preferred) and circulate the solution through the pump, hose and nozzle, and back into the tank for at least 30 minutes. These materials, ammonium nitrate and ammonium sulphate, are ordinary types of fertilizer, which may be purchased at most feed and seed stores very reasonably. After circulating, the material should be drained and discarded, and the equipment flushed with clean water. The treatment will clean out the very small oily film of 2,4-D which has remained in the hose, tank and nozzles.

### Seed from Horse-Radish

**U**NIL plant breeders at the University of Wisconsin produced seed from horse-radish, there was no record of it ever having been accomplished before. The Wisconsin College of Agriculture says that up to that time all horse-radish had been grown from cuttings; that is, using a portion of a growing plant to produce a new plant.

The Wisconsin workers collected horse-radish roots from many different areas in Wisconsin, and eventually found one strain of common horse-radish which could be crossed with a Bohemian type. This Bohemian type is not only resistant to rust and virus disease, which is common to nearly all horse-radish, but carries the ability to produce seed. Common horse-radish plants normally do not produce either fertile male, or fertile female flower parts.

### Crabapple Varieties

**T**HE situation with respect to crabapple varieties has changed comparatively little in the past ten years, according to C. R. Ure, tree fruit specialist at the Morden Experimental Station. The same varieties are recommended as in 1940, said Mr. Ure recently. Dolgo is one of the finest jelly crabs, but is too small and too difficult to pick, for commercial production. Progress is being made toward a large-fruited type, and numerous selections of Dolgo and other jelly-type crabs are now under test at the Station.

Among other crabapples, Columbia, Bedford, Florence, Osman, Robin, Garnet, Mecca, Calross, Anaros, and

Sylvia have been very hardy and productive. Some of these have other weaknesses, however. Mecca and Calross are extremely susceptible to fireblight. Sylvia goes out of condition too quickly, Osman is subject to fruit-cracking, susceptibility to fireblight, and unattractive coloring. Florence is occasionally injured by low temperatures. The other varieties, Anaros, Columbia, Bedford, Garnet, and Robin are productive, fully acceptable, and abundantly hardy, especially Columbia.

Apple crabs include Rescue, Trail and Rosilda, in about that order, and there are no new varieties in the Station test plots that promise to replace any of these in the immediate future.

An Indian Head variety, Renown, a Repka-Kislaga seedling, has enough dessert qualities, he believes, to be grouped with the other apple crabs. The tree appears fully hardy, productive and sturdy, though there are some indications of susceptibility to fireblight. The fruit is similar to Trail in size and coloring and matures in late August or early September.

### Know Your Shrubs

by DR. R. J. HILTON,  
University of Alberta

#### Lilacs

**H**OW best to discuss this popular, widespread shrub group in a paragraph or two? Why, there are 15 species quite commonly found in Canada, and the number of hybrids is increasing yearly, as is the number of named varieties being offered by leading nurserymen. So many of these are so beautiful that it would take far too much space even to describe the best of them. We will have to content ourselves with the briefest discussion of these true shrub-harbingers of spring. The quickly swelling blossom buds of *Syringa vulgaris*, the Common Lilac, reminds us to hope no severe late May frost will sear the heavy purple flower heads, or the even heavier blooms of the magnificent "French-grafted" varieties of the same species, which include Charles Baltet (double, blue-mauve), Congo (single, deep purple-red), Mme. Casimir Perrier (double, creamy white), Mme. Lemoine (double, pure white) and Marechal Foch (single, large, pink). Even earlier are the new *Syringa oblata* hybrids developed by Dr. Frank Skinner of Dropmore, Manitoba, of which three are Evangeline (double, deep lilac), Excel (single, mauve-pink), and Minnehaha (single, purple).

*Syringa reflexa* and *S. villosa* are excellent late blooming species in themselves, and have been combined by Miss I. Preston of Ottawa to give us such excellent varieties as Charmain, Elinor and Jessica, while the Morden Experimental Station also has introduced several beautiful named varieties (Coral, Nocturne, Redwine) from the same parents. These not only have the advantage of blossoming after frost danger is past, but run through a wide color range of white and true pink to deep lilac-blue and deep red.

*Syringa josikaea* (Hungarian lilac), *S. amurensis* (Amur lilac) and *S. persica* (Persian lilac) are other species useful in hybridizing. They are late-flowering and highly decorative in their own right.



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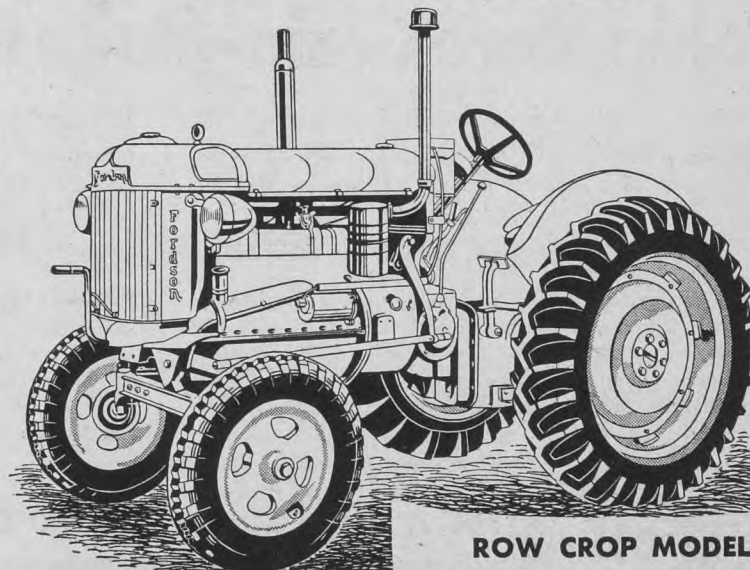
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# HERBATE increases crop value \$15 an acre

... says Reg Harvey, Wroxtton, Sask.

"Before using HERBATE 2,4-D I had to wait for frost to kill the weeds before harvesting," says Mr. Harvey. "Now, by using HERBATE I can combine my crop as soon as it ripens. My crop value increased \$15 an acre. Combining is much easier and less costly."



## GOT 10-BUSHEL INCREASE



**M. Bartlett**, Burnside Farm, Medicine Hat, Alta., writes: "I figure the use of HERBATE 2,4-D gave me an added 10 bushels per acre. Cocklebur, stinkweed, pigweed, ragweed, Russian thistle are all effectively controlled."

**T. R. Cuming**, Crossfield, Alta., is another HERBATE booster. "Using HERBATE," he says, "has increased my yield at least 10%. Stunted thistles were the only weeds which remained in the treated fields. On the other hand, in one 25-acre barley field which I did not spray, the stinkweed was so bad I had to clean the grain before feeding."



## Stan Fehr reports

### 100% KILL OF MUSTARD



"I got a 100% kill on all mustard with HERBATE 2,4-D," says Stan Fehr, Gladstone, Man. "The sow thistle were all stunted and did not go to seed. My yield was up 20% and harvesting was much easier as there were no weeds to plug the combine."

## "HERBATE INCREASED MY CROP STAND 20%"

**Fred Kopp** farms 300 acres at Wembley, Alberta. Here's what Mr. Kopp says about HERBATE 2,4-D. "My wheat was badly infested with pigweed and stinkweed, which were choking out my crop. HERBATE killed out 85% of the weeds and increased my crop stand by 20%."

## Ship More Grain-Make Bigger Profits

Weed control is both easy and profitable with HERBATE 2,4-D. Farmers report an average yield increase of 5 bushels per acre (some as high as

12 bushels). Of course, varying weather and soil conditions ... type and severity of weed infestation ... all influence the size of yield increases.

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An average increase of 5 bushels per acre with wheat at \$1.75 gives you an extra \$8.75 from each acre. Therefore, an extra \$1400 worth of wheat can be harvested from one quarter-section through the use of HERBATE 2,4-D to control a moderate to severe weed infestation.

### HERBATE 2,4-D

**HERBATE 2,4-D** is a product of the Agricultural Chemicals Division of CANADIAN INDUSTRIES LIMITED, Canada's largest manufacturer of chemicals and long-established leader in modern pest-control products. Branches in Winnipeg, Regina, Saskatoon, Calgary, Edmonton, Halifax, Montreal, Toronto and Chatham, Ont.

## Trash Cover

Continued from page 9

appreciated from the very first. If the soil is in proper condition there is some crumpling and shearing of the soil at the forward edge, and as the soil drops down behind the bar it is broken further and partly pulverized. All this is achieved without burying surface trash, or without the fine pulverization inseparably connected with rotary machines.

Like all other tillage implements, the blade has its limitations also. It must be used at least a couple of days ahead of a rain storm, for rain falling on newly bladed land will revive weeds, and all that the operator has succeeded in doing is transplanting weeds on a large scale.

Blades operate most satisfactorily in sandy loam, or silty clay soils. In heavier land the operator must take care to till the land when it is neither too wet nor too dry. As with mold-board plows it is hard to break down such soils with a blade. Disk-type tools under these conditions will do better work.

D. T. Anderson, machinery specialist at the Lethbridge Station, provides a clear statement on the comparative usefulness of blade implements. "Generally," he states, "I have come to the conclusion that in any area having soil and climatic conditions similar to Alberta, and in which a one-way disk can be used successfully, the blade cultivator can be used with an equal degree of success. Operational costs with blade machines are nearly equal to that for a one-way disk of equal width of cut. One survey taken in 1949, indicated the cost of 58 cents an acre for blades, and of 63 cents an acre for one-way disks. The costs include wages, gas, oil, repairs, depreciation, and other factors. Blade machines are well constructed and relatively free from mechanical troubles in the field.

"In comparison with one-way disks, the blade type of machine does not always provide as effective a means for controlling weeds. In this connection, farmers in this area are willing to accept the need for possibly one extra stroke with the blade in return for better erosion control insurance. A second disadvantage is that on some soils blade cultivators do not always provide a suitable seed bed when used just before seeding."

The Montana Experiment Station at Bozeman has this to add with respect to weed killing: "The sub-surface tillers which stir the surface of the soil" (i.e., the V-shaped blades) "are more effective in controlling shallow-rooted weeds than machines which depend on shearing action alone. Shallow-rooted weeds are the most difficult to control with sub-surface tillers, and special attention should be given to this problem when selecting a machine. The weeds which are hardest to control with sub-surface tillers are green foxtail, wild buckwheat and small Russian thistles.

"Better weed kills, and more satisfactory operation can be expected if a sub-surface tiller is pulled at a fair rate of speed. The slower the rate of speed the less soil stirring results, and the greater the tendency for the machine to become clogged. About



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# HERBATE 2,4-D



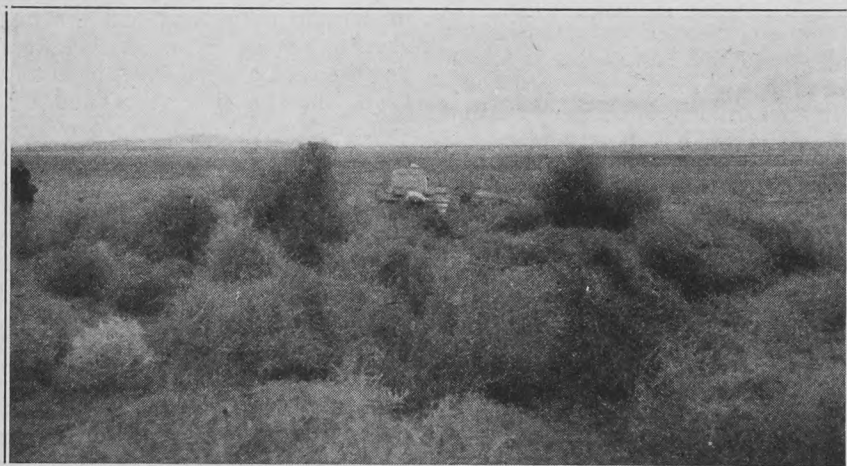
five miles per hour seems to be a desirable speed."

These implements make up the armoury of the trash farmer in western Canada. On the American Great Plains, where a parallel development has been taking place, another implement called the "treader" has come into favor. It is sometimes described as a rotary hoe, or a revolving spindle from which many slightly curved prongs stick out, and whose penetration into the soil is the only force turning the spindle. It does more of a packing than a cultivation job, but is useful for breaking clods, and for killing small weeds. The Americans declare that when stubble is light a treader should not be used for it tends to pulverize the soil, and creates conditions which favor drifting.

While it is true that some difficulties may be encountered when first attempting a system of stubble mulch farming, it is also true that when suitable equipment is properly adjusted and used, the operator will have little difficulty. The desirability of the sys-

To farmers who are not yet won over to the idea of trash cover fallows, the question arises "Just what are these fellows accomplishing that we are not achieving with the old standard types of implements?" It is a fair question and deserves more of an answer than to say that more farmers are adopting it every year where soil blowing is an ever-present menace.

LET'S take one opinion from U.S.D.A. bulletin No. 1977, which is perhaps the most exhaustive study of the subject. "Besides protecting the soil against erosion by wind and water, stubble mulch farming has proved highly profitable in low rainfall areas in dry years. In fact, the records for a period of three dry years, with corn, when stubble mulch was substituted, have shown a 60 per cent increase in crop production over that obtained with the usual method of plowing under all crop residues. In wet years there is little or no increase, and sometimes a decrease in crop production. The gain you get from stubble mulching in wet years comes



Russian thistle cleared by a blade cultivator without clogging.

tem has been demonstrated by scientific investigation and by the results obtained by practical farmers.

ONE of the worst difficulties incurred with stubble mulch farming is the trouble experienced in making a good job of seeding with standard equipment. The amount of trash left on the ground should be governed by what that farmer's drill will go through. Standard drills will go through a light stubble cover without too much clogging. Alberta farmers, who seem to prefer heavier stubble protection, are beginning to make use of the semi-deep furrow drills with wide spacings. Nine or ten-inch spacings will handle almost any well-prepared mulch. They may be put down to four inches if it is necessary to go that far to reach moisture, although the furrow is not usually covered with more than two inches of soil.

It is important not to allow straw to fall back into the furrow, for that promotes quicker drying. Some makes of drills are equipped with strap iron fingers, or other devices to keep the straw out of the furrow until earth has fallen over the seed. A popular type of drill is one fitted with press wheels following each furrow opener. Drills meeting all these specifications will leave a compact seed bed with the stubble piled between the seed rows to protect the land until the new crop has grown to sufficient height to take over that job.

from the protection against erosion, and the fertility of your land is constantly increasing.

"The cost of farming with (trash) cover on the land is usually no greater, and occasionally is considerably less, than when the land is plowed. The power required to pull a sub-surface tiller is roughly two-thirds as much as for a plow, when that implement cuts the same width and depth. When you operate a tiller at shallow depth, the draft is about like that of a tandem disk harrow.

"Except when it is necessary to go over the land an additional time with a tiller or weeder to kill weeds, the sub-tillage method is distinctly less expensive than plowing, disking and harrowing. Whether this extra tillage is necessary depends on the season and on previous efforts at weed eradication."

Montana and Kansas are the two states where Canadian-made blade implements have been most widely sold. The Montana Station, which has been studying stubble mulch farming since 1941, states that "yields in that period have been about the same from land prepared by sub-surface tillers as from plowed land, *provided there has been no loss from soil drifting.*" The qualifying phrase is, of course, the whole heart of the problem. If a sure defence against soil drifting could be guaranteed there would be no need for stubble cover farming.

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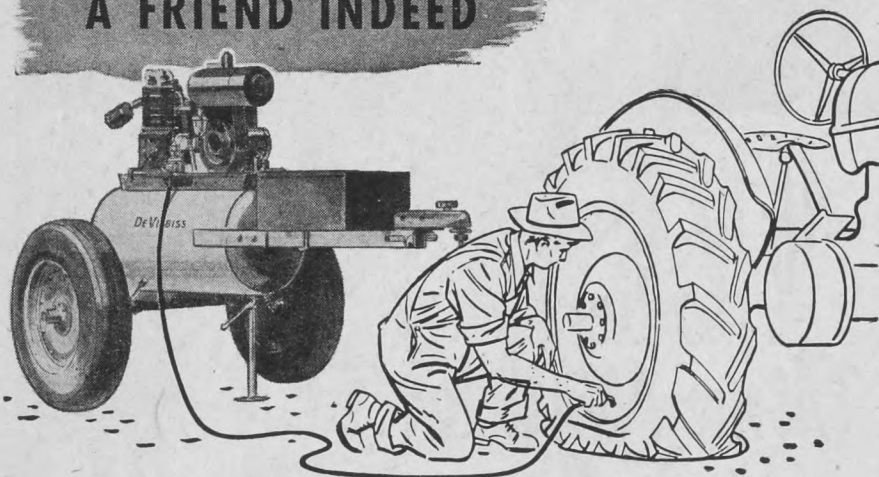
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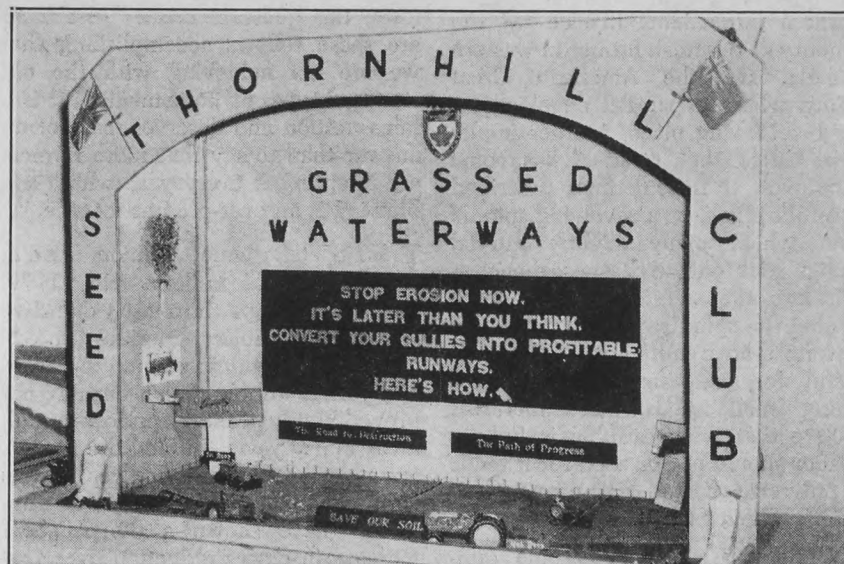


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## FARM YOUNG PEOPLE



[Guide photo]

One of the seed club displays at the recent Brandon Winter Fair.

### Gardening in the North

JUNIOR club work extends to the northern margins of settlement. A junior homecraft club, made up of students of the village school, was recently formed at Beauval, Sask., 210 miles north and west of Prince Albert. The club, sponsored by the Saskatchewan Department of Agriculture and the University of Saskatchewan, is the only one of its kind in the "far north."

The club is undertaking a gardening project. Members will start in the spring with cabbages, carrots and beans; this list will be extended as the youthful members gain more experience. They will exhibit their produce at the club's achievement day which will be held in September. Each of the 26 members will have an individual plot on the acre of ground that has been donated.

Don Neilson, provincial agricultural representative for the far north, says that agriculture has only come into being on a limited scale in the north over the last ten years, and that gardening is new to most northerners. It is hoped that this project will serve to stimulate an interest in agriculture and so finally provide much needed protective foods for the diet of northern residents.

### All-Canadian Judges

NO less than 613 calf club boys and girls entered the All-Canadian Junior Judging Competition sponsored by the Holstein-Friesian Association of Canada. Thirty-six of the contestants came within eight marks of the 150 points required for a perfect score, and the winner, Brian McCague, Alliston, Ontario, was so outstanding that he finished up with 150 points. Only once before in the nine-year history of the event had there been a perfect score; this was last year when two boys tied with 150 points each.

Brian McCague, who is 17 years old, has been a member of the Beeton Calf Club for three years. During this time his club calf has stood first every year; he has had a fourth and two thirds for showmanship; and his aggregate score for the year's work has twice carried him to first position and once to sixth. He takes a deep interest in, and is actively associated with, the management of his father's dairy herd.

An amazing record has been built up by sixteen-year-old Marbeth McCully who was top girl in the com-

petition. She has been a member of the St. Mary's Calf Club for four years, and has shown the winning calf three times. In 1950 she had the top calf, the high judging score, stood first for showmanship, and had the high aggregate score for the year's work. She has been a member of the Hybrid Corn Club for four years, and here also she has had high aggregate score for the past three years. Added to all these accomplishments she has won prizes at several seed shows, including a first at the Toronto Royal and a third at the Chicago International. In 1950 she had high score in the St. Mary's Forestry Club and was a member of the team that was runner-up for the provincial award in forestry.

These records only serve to highlight the achievements that are possible for young people through club activity. Others of the 600-odd members who took part in these judging competitions have equally outstanding records.

### Proficiency Certificates

SINCE the war there has been a demand in England for some scheme whereby members of the Young Farmers' Clubs, who were denied the opportunity of a college or institution education, should have the opportunity of getting a widely accepted certificate of proficiency. In 1947 a resolution was passed at the annual meeting of the National Federation of Young Farmers' Clubs asking for the setting up of some such arrangement.

The scheme has been studied since that time and it is now about ready to be put into operation. Aspirants for the certificate must be over 16 years of age and not over 25. They must have proven ability in some aspect of agriculture that is at least the equivalent of an adult who is considered a leader in this type of work. This calls for adequate training and instruction.

The scheme is to be administered by the National Federation, but examinations for the proficiency awards will be carried out at the county level. An applicant's work will be assessed by marks awarded on an approved scale of points. The pass mark is to be high—75 per cent of the total possible marks. Oral tests will not be permitted, but examiners can, using their discretion, ask questions that can be answered by action on the work done, or the implement used.



# Highland Haymaker

*The cony, one of Canada's more interesting animals, lives high in the Alberta and B.C. mountains*

by DAN McCOWAN

**H**IGH on the lofty mountains of Alberta and British Columbia lives one of the least known yet most interesting small animals native to Canada. Known as the cony or pika and sometimes called rock rabbit it is really a midget Alpine hare. Slightly larger in body than an average-sized hot cross bun and lacking a tail it might well be mistaken for a well-bred guinea pig and is a habitual ventriloquist. The favored dwelling place of this alert little mountaineer is within the rough debris of a rock slide whose numerous entrances, exits and intricate passage ways are familiar to the tenants. The smooth and silky fur of the creature resembles that of chinchilla but being markedly inferior in quality is of little value to anyone but the original wearer. Consequently the members of this highland clan are but seldom molested by mankind.

Conies are entirely vegetarian in habit and in marked contrast to their next door neighbors, the marmots, remain active during the entire year. Were it not for the menace of the bloodthirsty weasel, life would be rela-



[Photo by Dan McCowan.]

*A cony on the alert.*

tively carefree and the rocks amidst which the conies live would indeed prove a sure refuge. The coming of one of the slim, lithe cutthroats, able to penetrate at will to the inner fastness of their abode, spells tragedy to the affrighted little hares. It is doubtful if the swift onrushing avalanche claims many as victims and few are taken by the eagle or the coyote.

In early autumn all conies are employed in cutting and storing the hay crop that is so vital to their welfare throughout the forthcoming winter. Hay, of their own making, forms sole supply of food during the snowy months, and when their natural stone barns, in small dry caves or under shelter of an overhanging rock, are packed with fragrant sun-cured grass and herbs they face the winter with confidence.

Thus on sunny August afternoons on pleasant meadows beside their homes amongst the rocks, all are intent on the harvest. They cut green grass and edible Alpine plants and carry this material in bunches in their teeth, an operation which causes each one of the meek and harmless creatures to look like a whiskered desperado. Spread on

flat-topped boulders and exposed to warm sun and gentle wind the precious crop is soon dried, whereupon the prudent animals immediately set about building the hay stacks commonly seen in the rock slides when autumn is merging with winter. Each cony is apparently possessed of his, or her, individual hay pile.

During a singularly moist haying season when weather conditions must have proved trying to all farmers. I watched numbers of the four-footed harvesters busily engaged in mowing during heavy rainfall. When skies cleared and the sun shone they at once transported the sopping material to the drying floors. Otherwise many precious hours would have been spent in idleness and a much smaller quantity of fodder would have been secured.

When winter comes and the mountains are swathed in snow the conies, barefooted at other seasons, have been provided with sandals in the form of thick, coarse hair on the soles of the feet. This, together with an extra heavy fur coat on the body and with furry ear muffs, prevents frost bite and must be a great comfort to the wearers in zero weather and when the wind bites keen. However, during that bleak season of the year they are in large measure content to remain within the comparative shelter of the rock slide and under cover of the heavy white blanket.

**C**ONIES are by no means sociable, in fact they are markedly solitary in habit, a trait which is conducive to meditation and to tranquility of soul. In the highland glens of the Rockies and Selkirks individuals of the species may be seen enjoying a leisure hour, the while surveying the lofty mountain peaks and scanning the verdant valleys from the vantage point of a massive sun-warmed boulder. Occasionally they may be heard broadcasting a warning of danger to others of their kind. The voice is not so powerful as to awake echoes from cliff and crag nor is it likely to set great avalanches in motion, but nevertheless the thin piping sound produced by the creatures has remarkable carrying quality. There is nothing more characteristic of the rubble strewn slopes of the mountains of western Canada than the piercing whistle of the marmot and the plaintive call of the cony.

Little is known concerning the domestic life and habits of these chubby animals. I have never seen a juvenile cony nor do I know when most cony birthdays are celebrated. Averse to life in the valleys and loving the solitudes beyond timberline, these Alpine mammals seem most at home above the 6,000-foot level and have been known to live comfortably at an altitude of over 14,000 feet. Footing it nimbly amongst angular blocks of grey limestone or scampering across green meadow embroidered with campion and saxifrage they bear close resemblance to mechanical toys actuated by clockwork. Without their presence the sombre masses of fallen rock would be much more desolate and the neighboring marmots more lonesome.

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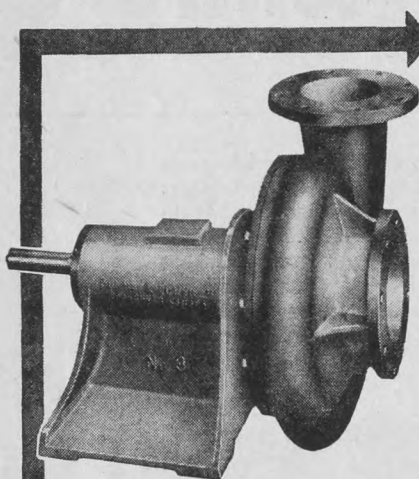


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## That Battery of Yours

Some things you ought to know to get the maximum use out of it for the longest time

by V. G. P. GERALD

THE electric storage battery as used in farm vehicles may very well be called the "heart" of your car, tractor or truck. In view of its vital function it is only reasonable that the users of these batteries should take great care in choosing a reputable brand. In making your choice of batteries a number of factors should be carefully taken into consideration. A battery intended for tractor and truck use should naturally be of a heavier duty commercial type capable of withstanding a great deal of vibration. For this type of work it is not always best to have a maximum number of plates, but rather fewer plates and thicker plates which will withstand shock a great deal better than a greater number of thinner plates. Fewer plates generally allow a better class of insulation and naturally withstand the rougher conditions experienced in tractor service.

The higher priced batteries carry a greater warranty than the cheaper ones. The farmer should know that storage batteries are generally rated in units of warranty. A battery having 30 warranty units simply means that it is covered by a guarantee of 30,000 miles or 30 months in passenger car use. In commercial cars, service trucks, tractors, and all Diesel vehicles, one unit equals 1,000 miles or one-half a month, whichever occurs first. As it is impossible to work out the units on farm truck or tractor service on a mileage basis, it should, therefore, be noted that a battery in use on a farm is normally guaranteed at the rate of one-half month per unit which in the case of the 30-unit battery will be 15 months.

During the year 1951 not less than 100,000 batteries will be replaced by new ones in tractors, trucks and in cars, by the farmers in western Canada at a cost of not less than \$2,000,000.

The above figures should lead us to ask why storage batteries have to be replaced as often as they do and should bring to mind the question of how storage batteries on the farm can be maintained at their highest state of efficiency, thus avoiding frequent replacements at high cost.

THE farm battery must withstand a great deal of shock and vibration. A large number of failures are attributable to rapid sedimentation building up through loss of active material which has been shaken loose by constant vibration.

Secondly, and this particularly applies to tractor batteries, a number of failures can be attributed to overcharging and the consequent buckling of plates. It is a fact that a number of tractors are operating without proper voltage regulation or with faulty voltage regulators that have been affected by dust conditions as well as vibration, which have put them out of adjustment. This condition gives rise to high rates of charge and high voltage which cause an excessive use of water which naturally has a serious effect on the battery.

A number of farm vehicle batteries are seldom used between December 1

and March 15, and during this period of idleness, if not properly cared for, irreparable harm can be done.

Having determined three of the major causes of breakdown, let us in every instance find a remedy to overcome these hazards.

To overcome the serious effects of vibration the farmer should take great care that his battery is securely held down in the unit by a well-fitting hold-down which affords an even and steady downward pressure around the top edge of the battery, taking care that there is very little sideways play. Cables should be examined to see that they are all of proper length, particularly not too short, thus pulling against the battery posts. The better grade of battery is constructed internally in such a manner that a considerable amount of vibration can be absorbed by the flexibility of insulation.

ON farm vehicles that operate long hours during daylight periods when there is very little load against the battery, careful note should be taken to see that the voltage regulator of the unit is working properly. This can simply be determined by watching the charge indicator which should show a state of charge for a short while after the unit has been started and then drop back to show no charge or very little charge. Also if the battery appears to be using an excessive amount of water it will be a sure indication that the battery is continually being overcharged causing excessive gassing to take place which, of course, will dissipate the water in the electrolyte.

On tractors that are not equipped with voltage regulators a simple switch can be installed in conjunction with the field unit which will cut down the rate of charge going into the battery while no load is being used. This switch can be cut in and out depending on whether tractor lights are in use, and depending on the general state of charge of the battery. If the battery for some reason or other may be low on charge it will of course be necessary for the generator to be charging, while if the battery is near the fully charged point the switch should be cut in, thus allowing very little input to the battery. Approximately \$3.00 worth of switch, and wire and very few minutes' time on the part of an automotive electrician will cover this installation.

During the period of the year when farm vehicles are tied up, it is essential that the battery be taken out and properly stored. The battery should be removed from the vehicle in a fully charged condition with the electrolyte at the proper level. A hydrometer reading of not less than 1.270 will indicate a fully charged condition. The battery should be carefully washed off with clean warm water. It should then be stored in a cool, dry place where the temperature does not go much below freezing.

Periodically (say every six weeks) the battery should be checked with a hydrometer to see if any appreciable drop has taken place in the electrolyte gravity. In event the gravity has gone



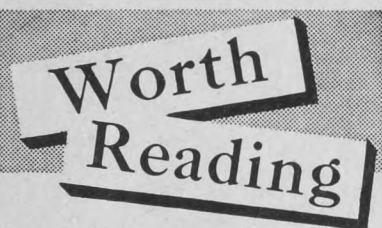
# NEW, MIRACLE ELECTRONIC EAR HIDES DEAFNESS

CHICAGO, (Special)—An amazing new electronic ear which hides deafness and transmits even whispers with startling clarity, has been revealed by a noted Chicago electronic scientist.

He disclosed that this miraculous new discovery has rendered old-style hearing aids obsolete almost overnight, and brings new hope to the 15 million persons in the United States who are hard of hearing.

He reported that this electronic ear enables the deaf to hear without any button showing in the ear and without dangling battery wires.

To acquaint the hard of hearing readers of this magazine with this new miracle electronic ear which hides deafness, full details are described in a fascinating booklet, "New Discoveries to Help the Deaf Hear." It will be sent free in a plain wrapper to anyone who requests it. Address: Electronic Research Director, 1450 West 19th Street, 1625 Beltone Building, Chicago 8, Ill. A penny postcard will do.



The new edition of the 'Royal' Booklet, "Farm Improvement Loans", explains how you may borrow up to \$3,000 at 5% simple interest. The loans may be used for practically any farm improvement, from fence repairs to electrification.



This booklet contains information of direct interest to all farmers. Ask for it at your friendly 'Royal' branch or write Advertising Dept., Head Office, Montreal.

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below 1250 it is desirable that the battery should be put on charge and brought to a point where all cells gas freely and the gravity once again reads 1270. In order to maintain the battery at its full normal efficiency during the period of four months it will perhaps be necessary to charge the battery twice.

In any event, when reinstalling the battery at the end of its storage period great care should be taken that the battery is installed in a fully charged condition. At this time all electrical connections should be carefully checked to assure clean and tight contacts, particularly the cables where they bolt on to the frame or the starter terminal.

HAVING discussed a number of the causes of trouble and their remedies there are still a number of important matters to keep in mind regarding the maintenance of batteries at their highest efficiency on the farm. First, batteries in normal operation will periodically require addition of water. There is no set rule for how often water should be added to a battery. Factors such as the temperature, the state of charge, and the voltage vary considerably. It is, therefore, important simply to add water when needed, always making sure that the water level is well above the plates and separators. The only safe and proper way to check this is to remove the vent plugs and look inside. Distilled water, clean rain water, or snow water should always be used in filling up the battery. It is best that the battery water be kept in a clear, clean glass jar where any impurities can easily be detected. Do not use well water in your batteries as it often contains chemicals which may do irreparable harm.

Cleanliness and dryness around the battery is very important. Periodically the battery should be checked to assure that the sealing compound around the cells is intact. Poor sealing will give rise to a certain amount of loss of acid strength by spillage which makes it impossible to check the acid gravity properly. It can easily become weakened through loss of acid seeping through where the seal is poor.

Never, under any circumstances, add acid to your battery as the acid content of the battery does not diminish through charging or discharging; it is lost only through spillage by upsetting or overfilling. Electrolyte gravities which exceed 1285 in a fully charged battery have a deteriorating effect on the separators and plate grids. The addition of acid, if required, should be left to highly qualified battery technicians or battery shops having the proper equipment to test and check their work carefully in the shop.

Farmers should give considerable thought to the interchangeability of batteries and familiarize themselves with the various groups and sizes which are used by all battery manufacturers. There are numerous instances where the truck, the passenger car, and the tractor all take the same group and size of battery, which, of course, will afford the farmer the opportunity to rotate his batteries assuring him that none of his vehicles will really be stuck. This also affords him the insurance which a spare battery provides.



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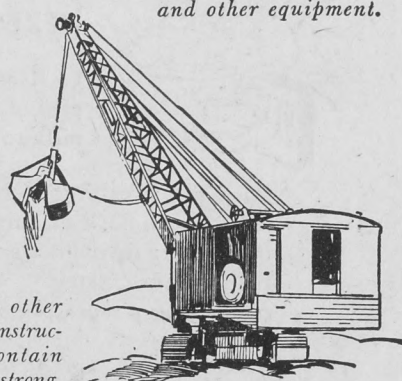
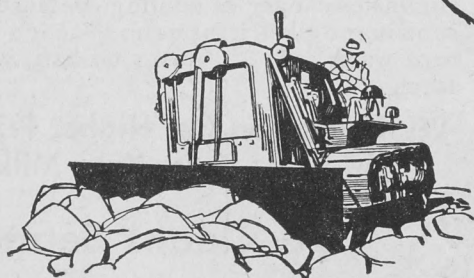






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## High Spot

Continued from page 10

coming up again. When the last batch of men stepped off the hoist they'd assumed as a matter of course that it would go up again, while the electrician hadn't counted and thought everybody was down. He was hay-wire, anyhow. All electricians were. And of course the timekeeper was officially supposed to check everybody off the job. That was regulations. But in practice he was much more likely to verify leaving times with the pusher next morning than to wait and fondly kiss each man goodnight. There'd been a slip-up. The electrician had yanked the switch and gone home to supper. There was nobody below but the night watchman. Johnny and Mike were waiting quite uselessly on bare steel girders 28 stories up, with a forecast blizzard moving across the city.

"Hell!" said Johnny angrily.

Something touched his cheek lightly. He reached up, but it was gone. A little later the thing happened again. He lighted another cigarette.

try to walk the girder in a wind like this. He straddled it—and at that had to bend toward the wind—and inched his way along toward Mike. The column that had been his back rest vanished behind him for all the light he had and for all that he could see, the universe might have been constricted to a bare 10 feet of steel beam fixed in a swirling frigidty.

He almost blundered into Mike. Mike muttered despairingly:

"I kill that fella! I kill him for this—"

He hadn't moved. Johnny snapped above the roar of the wind:

"Hey you! Get around that column and over to the scaffold! Get on over!"

Mike said passionately:

"I kill that fella for leave me up here! I cut his heart out—"

Johnny roared at him. He bullied him. Mike was the bigger man, but Johnny was the veteran, with a veteran's vocabulary and driving force. Mike moved grudgingly, in panicky submission to Johnny's bloodcurdling threats.

The first 40 feet was not very bad. The second was. The third long stretch was very bad indeed. By the time Mike



"I wouldn't bother if I were you. Her vocabulary is already quite adequate!"

"Snow's comin', Mike," he said. "Got any ideas? Signal wire's busted. The hoist ain't comin' after all. That's certain!"

Mike swore sulphurously, with a hint of panic showing through.

"Let's get over to the forge scaffold," said Johnny. "Fix you up if we can start a forge over there."

THE scaffold was four heavy planks laid across a corner of the steel framework. On it were the two forges which heated rivets for use. One man tended each forge and tossed the hot small chunks of metal through the air to where other men caught them in cone-shaped cans. In the daytime, with rivet guns filling the air with their clanging whine and the "clunk" of hot rivets in the cans; with all the racket and confusion inseparable from construction work, this place was a cheerful if noisy spot. It was a good deal less than that now.

Wind hit hard, and many cold prickles touched Johnny's face. The snow had arrived and, with it, wind. Johnny looked down for an instant. Lights directly below were intermittently visible, but they were encircled by swirling white stuff that blotted out everything else.

Johnny swore again. And he with a ticket to the fight tonight! He didn't

crawled onto the four planks that made up the forge scaffold his whole body was coated with white. But the snow didn't stick by melting but by the needle-sharp crystals tangling in the cloth of his clothing like burrs. Johnny was in at least as bad a situation.

He crawled onto the foot-wide planks above emptiness. He snarled: "Now, see if you can get a forge lighted. Y' got to wait some. Maybe a long time. Freeze to death if y' don't look out."

He thought bitterly of the fight tonight. He'd expected to get in some bets on it, which would add to the thrill. But instead of hunting up benighted souls who thought the Torpedo had a chance, he was having to dry-nurse Mike Giskra and half-freeze himself through the idiotic blunder of the hoist man on the ground below.

Mike tried to start the nearest forge. Presently he blubbered hopelessly, but at least half of it was rage. A rivet forge, you understand, runs on coal, and it is easily started of a morning by putting a piece of oil-soaked waste in the bottom, lighting it, and adding a little coal and working the blower. Mike could have done all that, even with one hand in bandages. But without oil-soaked waste—normally brought up in the morning by whoever started

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the forges—he could have done little in any case. In a gusty snow-laden gale, he could do nothing at all. He couldn't start the forge. Johnny tried, and he failed too.

"Losin' time," he said savagely at last, with snow crystals like frozen sand on his lips. "Can't keep warm like this! Hell!"

Then he said suddenly: "A rivet gun! Everything else is haywire. Maybe they forgot to blow the air line! If they did, we can wake up that watchman with a gun against a girder."

It wasn't a bad idea, given compressed air. The noise of a rivet gun should travel a long way.

Johnny kicked open the toolbox. Normally it would have been locked, but the ladders had been sabotaged. No way for a thief to get up here, now. He hauled out a gun, jammed the riveting head loosely against solid steel, and pulled the trigger. Plenty of noise should have resulted. Actually, nothing happened. Nothing at all.

"No air!" said Johnny furiously. "Damn 'em, they had to have one thing right! An' me with a ticket to the fight tonight!"

Mike did not say anything.

Johnny poked in the toolbox again, furiously.

"Hell's bells!" he said raging. "Any other time somebody'd ha' hidden part of a pint in the toolbox, but this time they' keepin' all the rules! You' just goin' to have to take it, Mike. This'll be the best I can do. Watch!"

The command was useless. Mike could not watch anything in pitch darkness and smothering snow. But

Johnny used a maul and knocked one end of the toolbox completely out. He pulled out the contents, scattering the stuff recklessly. One item, though, was a rope used to manhandle girders that wanted to swing with the wind, when men wanted them lowered in a special place. Johnny put his leg through the coil to keep it from being blown or kicked away. He hauled Mike up to the toolbox and shoved him into it as far as he could go. It was some protection against the wind for the upper part of his body, anyhow.

"Now listen!" snapped Johnny. "I'm goin' on down. If I have any little trouble, it'll be a hell of a long time before I get back! You keep kickin' your legs an' feet so they won't freeze."

"Okay," said Mike bitterly. "I think how I kick that hoist guy tomorrow. I kill that fella, Johnny! I cut out his heart—"

"Sure!" said Johnny. "Figure out some good stuff to do to him. Y' can't keep movin' like I can, but keep kickin'. An' here! I won't need this. Stick it around wherever you get coldest."

He stripped off his coat—he'd brought it aloft to wear while he ate his lunch—and gave it to Mike. Then he picked up the rope from the toolbox and began to crawl across the platform while wind tore at him and snow poured upon him.

A LITTLE later he was inching over steel again. He made his way to the head of a column going down. He'd slid down columns before. It's almost a standard way of getting down to the ground quickly at quitting time.

But a man with a burned hand can't do it, of course. One needs both hands plus nerve and a certain knack. Johnny had all requirements. He slung the rope over his shoulder, swung his legs down, gripped, and slid.

That was easy. One floor down. He repeated the trick. Carefully, of course, because he was still 27 stories up and he had to think of Mike. Presently he



"Couldn't you put a little more expression into it?"

came to the temporary flooring. Below this was sleet. He wrestled a plank out of the way and prepared to go on down. But here he had to change his tactics. All the steel work that had been in place when the sleet storm blew had been plated thickly with ice. It was off again above the temporary floor, but it remained below. And the glossy, infinitely slippery stuff made sliding hereafter too much of a chance to take. He could slide, to be sure, but he could not control his progress. There could be no braking on sleet,

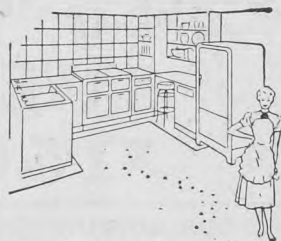
and the jar of landing would certainly throw him off sooner or later. So he had to prepare for a slowed form of descent.

AN icy, utterly frigid blast tore at him. Needle-pointed snow crystals rasped at his skin and worked into his collar and up his sleeves and into his eyes and ears and nostrils. He swore thickly. He straddled the ice-coated, slippery beam, gripping tightly with his legs. He paid out his rope, one end on each side of the beam, while the wind swayed him on his perch. The rope whipped and lashed crazily below. Then he gathered the two strands in his hands under the beam. They would hold him, and by letting one go he could haul his rope clear off this beam once he had a secure seat on the next one below.

He took a turn of the double rope about one thigh, slipped off the girder, and went down. The rope snubbed about his leg served to check his descent, but as he dangled farther the wind swayed him wildly. He'd expected to steady himself as he went down by the ice-covered column. In part, perhaps, he did. Sometimes he could hang onto it with his legs while he used his arms for lowering. But the wind hurled itself at him. He swung crazily, wallowed and lost his leg grip on the column and was smashed savagely against it by the gale.

Then something hit his feet. He spun dizzily. He groped at it again and again. Bit by bit he lowered himself astride another beam. And this was coated with infinitely smooth and slippery stuff too. He held fast by sheer

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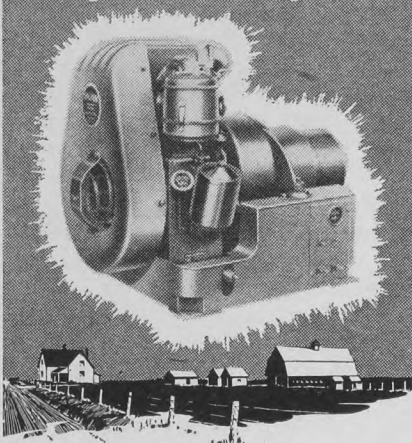
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strength while he straightened out his twisted rope and loosened the lee end—it whirled away crazily in the storm's blast—and hauled on the other end until it tumbled free.

Then he lowered the two ends once more and gathered the double strands and swung under and descended again. It was like a nightmare. When he tried to steady himself by a column, sometimes it worked beautifully. Sometimes he was torn loose and crashed against it. It was infinitely difficult to catch on the slippery girders of each level when he had located them with his feet. He slipped and slid and twice was near to breaking his own death grip on the doubled rope by which he descended.

But he went on. He was eight levels down. Nine. Ten. Appallingly far from even such companionship as Mike had constituted. Five times more, at the least, he must loose the two ends of the rope and feed them out carefully, and then with ever more cold-stiffened hands swing below an ice-glazed girder and go dangling down while the blizzard wind beat at him.

HE resented Mike, now. But he resented the electrician still more. If it hadn't been for the hoist man's stupidity there'd have been no trouble. By this time he—Johnny—would have been going to the fight club.

But there was nothing to be done. He went down the rope again. And again. And again. It was a sort of Sisyphian torture to which he was unreasonably condemned. When at last his dangling feet—his whole body buffeted and spun dizzily about by snow-laden wind—when at last his feet touched concrete he could not believe it. He clung to his rope until he had tested the incredible solidity under him. It wasn't quite solid. There was a certain crystalline feel to it. The substance was unmistakable. Goulashers' work. Arches for the floors, newly poured and the concrete still soft enough to feel like heavy, wet sand. There was tarpaulin to keep it from freezing, and salamanders—outdoor stoves—to make sure. At first Johnny could not smell the salamanders' reek. He was at the windward edge. But as he stepped gingerly in search of the stairs he caught traces of an oily reek, mixed with curious stray tendrils of warm air in the middle of the blizzard's icy blasts.

Then he found the stairs, and the rest was simple. He was even partly warmed by the relatively sheltered exercise of descending steps. Then he came out into the muddy, unbelievably confused small space which was the ground level where trucks came in with water pipes and bricks and plaster and electric cable and concrete. A single unshaded bulb burned before the watchman's shack.

Johnny went belligerently into the shack. His language was not nice as he explained the situation. Then he went to the hoist motor and threw the control switch. Nothing happened. He swore and poked around. He found that the electrician—to make sure that nobody else got any overtime in which he did not share—had followed the haywire practice of electricians and had removed the main fuse from the power circuit, and either had hidden it or carried it away in his pocket. It was quite typical of those temperamental guys, electricians, but it was also infuriating. Johnny's language



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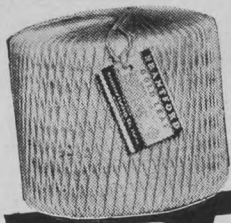
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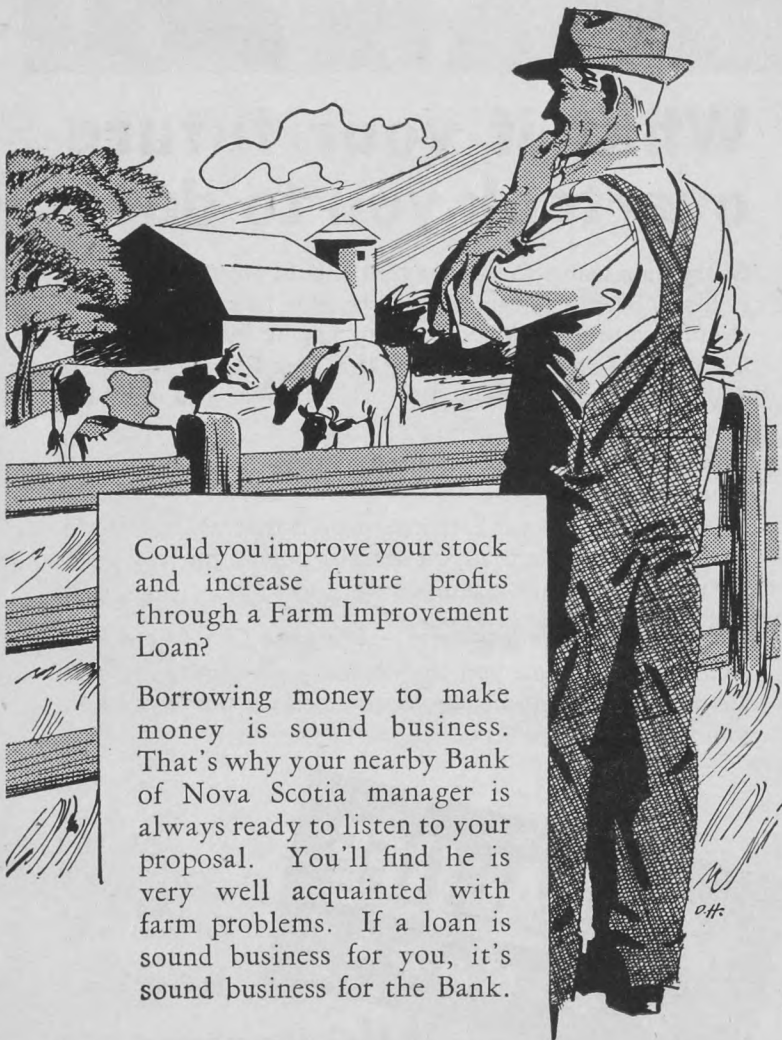
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became really sulphurous when he went back to the shack and explained this item in his series of enraging events.

THE watchman telephoned frantically. The electrician, naturally, began a truculent explanation over the telephone. Johnny took the instrument and nearly burned out the wires with his language—because it was already late, and it was getting later for the fight between Socko George Andrews and Torpedo Ames — and spent the time while waiting for the electrician's arrival thinking up newer and even more pungent comments to make. At long last the electrician did get there and Johnny rode the hoist up and got Mike.

They came down safely enough. Johnny was still far from mollified, but he had partly thawed himself in the process of speaking his mind. He thawed himself further while the abashed hoist man prepared to go home for the second time. Then Johnny got ready to leave. He looked for his coat. He had loaned it to Mike while he descended. But it was lost, some time during the time Johnny was on the way down, or while he was making ready to go back up in the hoist. Johnny radiated rage — and in such a mood any expression of gratitude or appreciation from Mike would have been inappropriate. He made it inappropriate.

"That's what comes," he said furiously, "of lendin' somethin' to a half-

wit! Dammit, Mike, you should a taken care of that coat!"

"I buy you another one, Johnny," said Mike, "You do me a favor, Johnny. A swell favor! I lose your coat. So I buy you another. With braid on it!"

Johnny spat disgustedly.

"Braid on it, yeah!" he said wrathfully. "To hell with you buyin' me another one! It's late now! I gotta go to that fight in my shirt sleeves unless I stop by home! An' I might miss part of the main bout! Hell's bells!"

He stamped out.

Thirty minutes later, however, he was in his ringside seat. He had stopped by his home and got another coat. His face was red from the cold. There were burns on his hands from the rope. There were divers aches and bruises and scratches on him, acquired during the climb down sleet-covered steel from the 28th story of what would some day be an office building. But he had changed his clothes and spent lavishly for a taxicab. He was at the fight.

He settled himself comfortably in his seat. It was ringside, and it was good. And there was a thunder of applause, and Socko George Andrews marched down the aisle in a pink bathrobe to await the appearance of Torpedo Ames. When he appeared, Johnny Chambers drew a deep breath of satisfied anticipation. He lighted a cigarette and zestfully prepared to watch Socko George Andrews hammer his way one step nearer to the welter-weight crown.

## Community Garden at Willow Bunch

Eleven Metis families grow an 11-acre garden

by J. T. EWING

ELEVEN Metis families at Willow Bunch, about 100 miles south of Moose Jaw, in Saskatchewan, worked together last summer to grow an 11-acre community garden. When fall came they dug 600 bushels of potatoes and 3,000 pounds of carrots. These they stored in a storage cellar which has a storage capacity of about 1,000 bushels.

In addition to the potatoes and carrots they grew a lot of sweet corn. They canned 100 jars of corn and sold 1,000 dozen of roasting ears which netted them \$200.

Most of the credit for the success of this enterprise is due to the diligence of Fr. F. M. Blanchard, assistant curator at Willow Bunch. He has worked hard to help these families, 43 persons in all, to become self-supporting.

The majority of these people, according to Fr. Blanchard, are descendants of Indians who fled to this valley to escape the vengeance of the white people in retaliation for the Custer massacre at the Little Bighorn River in Wyoming. They intermarried with white settlers who came to this area later. Practically all speak English and most of them speak French. A few of the older ones speak the Sioux tongue.

They now have built fairly comfortable homes on municipally owned land on the southern outskirts of Willow Bunch. The community garden project in 1950 was designed to give them some extra cash to help with living expenses. Each family had their own individual garden so it is expected that nearly all the vegetables produced in the community garden can be sold.

The whole district is interested in the project. Several farmers brought their tractors and tillage equipment last spring and made a short job of preparing the seedbed. The Metis collectively own a two-row cultivator. They took turns in keeping the weeds down between the rows while others wielded hoes. They own a potato digger among them which they used to harvest the potato crop.

The Metis were so proud of the vegetables they grew that last fall they held an exhibit of garden produce in Willow Bunch.



Left to right: Fr. F. M. Blanchard, Jos. Sonne, and Deputy Minister B. N. Arnason, inspect vegetable storage cellar at Willow Bunch.



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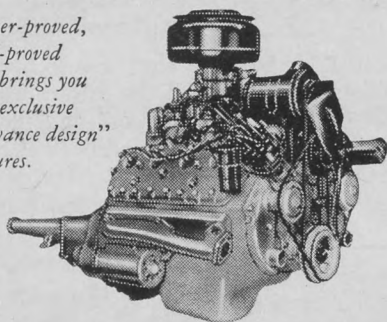
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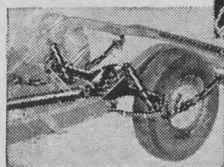
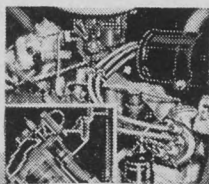
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During the period between 1914 to 1922, 150,000 trees were killed in a limited area of the Fraser Valley, when 1,500,000 pounds of bark was stripped off and shipped out.

When land clearing is in progress the Cascara tree goes down before the axe along with the willow and maple and together are piled and burned, because the land owner is unfamiliar with this valuable species of tree.

THE same wasteful acts occur during land clearing that takes place in towns and cities. John Davidson, emeritus professor of botany at the University of British Columbia, well-known authority on the Cascara tree, noted that on one lot measuring 140 feet by 110 feet, 94 Cascara trees were cut down and the bark was not utilized, instead they were all burned.

The proper way to harvest the bark is to cut down the tree before peeling, leaving perhaps a foot of stump, and not less than six inches. From the stump come new shoots that in three or four years produce flowers, then berries, which become food for the birds, and the seeds are sowed broadcast by nature throughout the region.

The usual method of stripping the bark off the standing tree results in death of the tree and a rapidly depleted resource of Cascara. Mr. Davidson said he has seen "many hundreds of stark white skeleton trunks of Cascara trees left to die and rot as a result of this method of harvesting the bark."



To prepare the Cascara bark for home consumption, dry a small quantity of bark, powder it like coffee and then store it in a sealer or can. The next step is cooking it just like you would make coffee. Use a percolator (not a drip coffee pot), and allow it to percolate until the bark is exhausted. Let it cook until the percolator holds about one-third or less of its original volume and then bottle it. One teaspoonful in a half a glass of water should be sufficient for one dose. However, as the efficiency of the bark varies in different trees one may find it necessary in some cases to increase the dose.

It is believed that the answer to the dwindling supply of Cascara lies in a reforestation program such as the one carried on by the Forestry branch in their nurseries to increase timber trees.

This does not necessarily mean that large plantations should be set out. Although trees planted would be ready for harvesting from fifteen to twenty years, the seeding of large numbers of Cascara trees would spring up in the wake of the birds as they scattered the seeds from the berries.

As British Columbia is the only part of the British empire where this tree is native, residents of this province should become alert to its commercial value, proud to have it growing in their hills and pay particular attention to its conservation.



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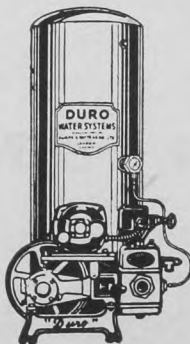
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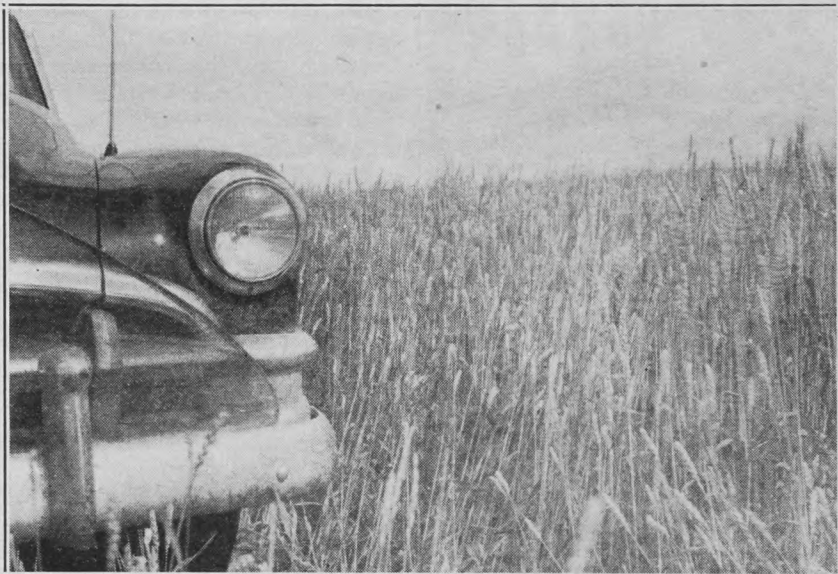
## This Farm Is a Business

*This modern, two-section, mechanized farm in southern Alberta combines good business and good living*

**E.** H. SCHULTZ, who farms two-and-a-half miles south of Milk River, Alberta, is a transplanted American. Alberta has a lot of transplanted Americans, and they have done her good. There is something about Alberta which is different from either Saskatchewan or Manitoba, and I have for a long time felt that the substantial infusion of American blood into the province in earlier years has had something to do with it. It isn't all oil, or gas, or cowboys, or the Rocky Mountains, although it is true that the irrigation development and the ranch atmosphere of the south are powerful influences as well. Mr. Schultz has been transplanted on Alberta soil for a long time. He grew up on his present farm and has lived there for 39 years. He has two sections of land, of which about 1,200 acres are cropped, mostly to about 700 acres of wheat, with approximately 500 in summerfallow, though there is a small amount taken out for pasture.

from the barn, are the fuel tanks, and west of the house, a short distance, is a two-roomed cabin for hired help, which will accommodate a married couple. I was much impressed by the neatness, efficiency and comfortable appearance of the farmstead.

Three of the buildings deserve special mention. These are the barn, the implement shed and the shop. The barn was built in 1910 but now houses only two cows and a couple of pigs. They, together with the White Leghorn hens, kept for eggs, and the New Hampshire cockerels for meat, are kept only to supply the family, and Mr. Schultz's father, who now lives in Milk River and is supplied from the farm. In other respects, the barn has been remodelled into a storage for feed, grain and truck, and for seed cleaning. Upstairs is an electrically operated elevator and cleaner; downstairs are feed bins, and storage for the three-ton farm truck with electrically operated hydraulic dump. Mr.



*E. H. Schultz, Milk River, Alta., was justifiably proud of this crop last year. It was a large field and might well have averaged 40 bushels.*

I saw the buildings for the first time after they had been freshly painted, and from the highway half a mile east—the only side from which they are not more or less hidden by trees—and they commanded one's attention immediately.

Turning left into the farmstead from the side road leading west from the main highway there is a small pasture field on the left, and on the right, one of the two main gardens, protected by a shelterbelt. Next on the right is the house, snuggled in among the trees and hedges, and located on a slight rise of perhaps ten feet, below which the drive continued past the wind charger, which has an electric throw-out, and from which water is piped underground to the house. Then on a few yards to a neatly painted barn, and a few yards farther to the quonset-type implement shed. Off to the right a little is the farm shop, and between shop and house, a neat little poultry house built into the rise of ground, like a dugout. Between the implement shed and the barn is an entrance to a third, but smaller garden, protected by the buildings and caraganas. Set out in the pasture field, a few yards

Schultz tells me that he has stored as much as 19,000 bushels of grain on the farm, but the bins will only hold 16,000 bushels.

The quonset-type implement shed has what its owner described as the biggest elevating door in southern Alberta. It is 18 by 20 feet in size, and was designed by himself. Inside the shed is room for separator, combine, tillage implements, three tractors and other equipment. Two of the tractors are large field units, one of them a Diesel, but the third is a Farm-all cub, which is used for the garden, for hauling implements, and for other odd jobs, such as hauling manure.

**T**HE secret of the up-to-the-minute painting job on the buildings was revealed in the shop, where I saw the home-made paint spray outfit which Mr. Schultz had made from a hot-water tank, a gas engine, a two-gallon paint container and a pressure pump. With this equipment always available, painting can be done in spare time, and quite evidently is done. The shop contains two welding outfits, and pretty well a complete repair outfit. That this is justified is evident from



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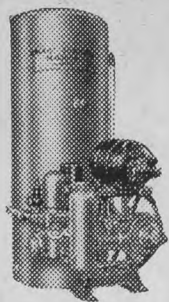
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## Rhizoma

Continued from page 13

rhizomes and spread than a crop grown for hay or used for pasture. The energy of the plant has gone into flower and seed production, and the soil moisture has been utilized by the plant for the production of flowers and seed, and not for rhizomes. As most of the Rhizoma seed distributed to date has been used for seed production, it should not be expected that the production of rhizomes would be at a maximum. In contrast, it is noteworthy, particularly on Vancouver Island, that under pasture conditions, stands have thickened very rapidly.

Rhizoma is too new a variety for its zones of usefulness as yet to be clearly defined, or its quality of persistence to be fully demonstrated. At the same time results of tests would indicate that where environmental conditions are such as partially to restrict creep, or spread, other qualities such as winter hardiness, high forage and seed yield, and pasture adaptation still make Rhizoma a most valuable variety for Canadian farms.

(NOTE: Dr. G. G. Moe is professor and head, Department of Plant Science, University of British Columbia, Vancouver.—Ed.)

## The Wolf Menace

Continued from page 12

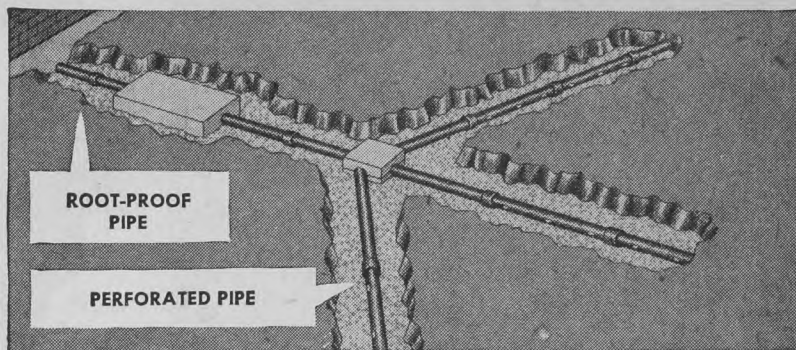
There are a number of so-called naturalists who can raise the physical temperature of game lovers, also livestock owners, by suggesting that wolves be protected in certain specified areas to maintain the balance of nature. It would be most interesting to learn how these wise morons figure to keep the wolves in their allotted area. Our parks demonstrate this fallacy. Of course wolves can be killed in our national parks, but only by wardens or hired hunters, and with no incentive, why should they exert themselves? And so these parks become a breeding ground.

I think poison is the answer and the men attending the job be employed by the government and have a good working knowledge of wolves, and they cannot do this driving around in cars and jeeps.

WITH the wolves if not eliminated at least curtailed, and the illicit killing of game severely punished, our big game could stage a comeback, and we could raise sheep and other livestock in a country well suited for that type of effort.

The timber wolf is really a federal problem, but try and get your member interested! We also get very weary of being told that the natural resources belong to the people. Fine! If they own both the assets and liabilities, and manage them so that no penalties fall on innocent individuals. Hunting licences, trapping licences, royalties on furs, etc., all very nice, but how about damage done to private property by wolves? Why shouldn't the department be responsible to farmers for livestock destroyed by these predators? Farmers and ranchers have their assets and liabilities. Apparently the Natural Resources can carry on without having to recognize any liabilities to the individual or group. So for the time being, let the cows keep their horns. They, at least if they could, will thank the Department of Natural Resources.

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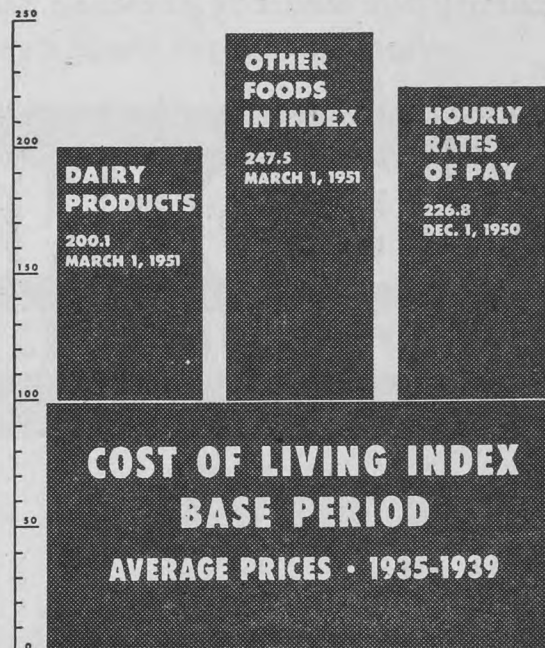
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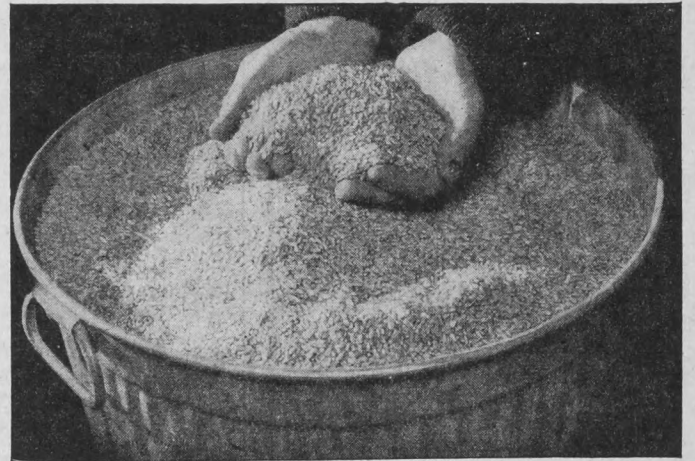
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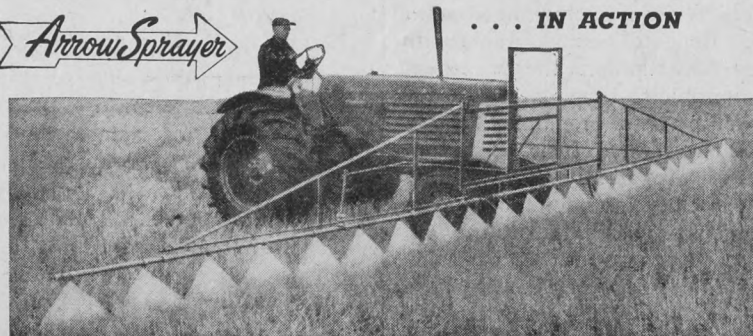
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# MONTHLY COMMENTARY

This feature is furnished monthly by United Grain Growers Limited

## Wheat Prices

On August 1 last, at the beginning of the current crop year, the price for domestic wheat and the maximum price under the International Wheat Agreement, which was the actual selling price under that Agreement, was \$1.98 per bushel. Shortly after, when monetary exchange controls were relaxed, and the exchange value of the Canadian dollar increased, this price level declined and has recently been \$1.89 per bushel.

The price for Class II wheat, that is for export to countries outside of the I.W.A., instead of suffering a corresponding decline has advanced considerably. It stood at \$2.06 per bushel on August 1 last, and at the end of the month was at \$2.01 or just three cents per bushel higher than the I.W.A. price. (All these prices are basis No. 1 Northern in store at Lakehead terminals.) From that level it has advanced steadily until toward the end of April it was \$2.28, or 39 cents per bushel above the price for wheat under the International Agreement and for domestic use.

The Canadian Wheat Board seems to set this Class II price somewhat independently. It has risen as the price in the United States on the Chicago market has risen, but, nevertheless, has always been kept well below the Chicago price basis. While wheat from Canada and the United States may be said to be generally competitive on the international wheat market outside of I.W.A., they are not entirely so. There are some countries, which because of receiving Marshall Plan aid from the United States, or for other financial and political reasons, will buy wheat in that country even at prices considerably higher than they would have to pay for Canadian wheat. Other countries are good customers of Canada, and it would appear that the Wheat Board must have exercised restraint in pricing the limited quantities available for Class II wheat instead of making such customers pay the highest price that it might have been possible to demand from them.

While the present price differential is high as between milling grades for I.W.A. and Class II sales, there is no differential when it comes to Grades No. 5 and lower.

Quite evidently the Wheat Board set its prices for these lower grades at a level designed to be attractive, whether the purchasing country should be a member of I.W.A. or not. Purchasing countries which are members of the Agreement have tried to confine their buying to higher grades suitable for milling. Even when they do buy No. 5 wheat they would wish to be considered as buying it outside of the Agreement, to prevent it being charged against the quota to which they may be entitled. The United Kingdom did recently buy some fairly large quantities of No. 5 wheat, and allowed these to be recorded as applying against its quota under the Agreement. No doubt the buying authorities there realize that the wheat in question might as well be included as covered by the Agreement, because Canada does not have this year a sufficient quantity of high grade milling wheat to cover all of this country's commit-

ments under the International Agreement.

The United States has now completed sale of its full Agreement quota, and Australia's sales are practically completed. Consequently it is to Canada that buying countries now look for remaining quotas under the Agreement. This country has still to sell about 35 million bushels before completing its commitments. The United States is refusing to enlarge its quota, and any wheat bought in that country for export is at the prevailing market price, 60 cents per bushel or more above the maximum price stipulated in the Agreement. The United States Government has subsidized all sales this year under the Agreement, at a total cost which cannot be very much less than 100 million dollars. Farmers in the United States have received the full market price for their wheat, and the government there has absorbed the full burden of the Agreement. The Government of Canada has undertaken no such expenses, and to whatever extent the maximum price under the Agreement represents a burden, that has fallen upon the Canadian wheat producer.

Most importing countries have completed their quota of buying. These include Austria, Belgium, Bolivia, Ceylon, Cuba, Denmark, Dominican Republic, Ecuador, El Salvador, Haiti, Indonesia, Lebanon, Mexico, Nicaragua, Norway, Panama and Switzerland. Of those countries Austria, Denmark, Greece and Mexico have obtained all their supplies from the United States. Australia supplied all the needs of Ceylon, most of those of Egypt, and so far has been the only exporter selling wheat either to New Zealand or to Sweden. Canada has sold wheat to all of the other countries mentioned above. In addition this country has supplied most of the wheat imported by the United Kingdom, all of that imported by the Union of South Africa as well as a substantial part of Italy's imports.

## What Is a Bushel?

What is a bushel? That question becomes of present interest because of "An Act Respecting Weights and Measures" which is now before Parliament. Legally a bushel is whatever Parliament declares it to be.

A bushel is both a measure of capacity and a measure of weight. Under the Canada Grain Act a bushel is a certain weight of grain, 60 pounds of wheat for example. To be sure you have to know what a pound is, and a pound is legally described in the Weights and Measures Act.

That Act says that eight gallons shall be a bushel. It also says that "the standard measure of capacity, from which shall be derived all other measures of capacity as well as for liquids as for dry goods, shall be the gallon containing ten Canadian standard pounds weight of distilled water weighed in air against brass weights with the water and the air at a temperature of 62 degrees of Fahrenheit's thermometer, and with the barometer at 30 inches."

Here again, to be certain, we have to know what the legal pound is. The Act says that "the imperial pound as

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established by the Weights and Measures Act, 1878, of the United Kingdom and represented by the Platinum-iridium weight mentioned in Schedule 1, shall be the legal standard measure of weight and of measure having reference to weight and shall be called the Canadian standard pound."

Then the Act says that the primary standard of weight shall be a certain platinum-iridium weight which was placed in the custody of the Minister of Inland Revenue under an Act of the Canadian Parliament in 1943, and which is now in the custody of the Minister of Trade and Commerce. It is on that single small piece of composite metal that all Canadian standards of weight and measure rest.

It is described in Schedule 1 to the Act as follows:

"A cylinder nearly 1.35 inches in height and 1.15 inches in diameter, with a groove or channel round it, the middle of which is about 0.34 inch below the top of the cylinder, for insertion of the points of the ivory fork by which it is to be lifted; the edges are carefully rounded off, and such standard pound is marked "A." The weight of this standard in terms of the Imperial standard is 6999.97694 grains when both are weighed in vacuo and 6999.98387 grains when both are weighed in air at the temperature of 62 degrees of Fahrenheit's thermometer, the barometer being at 30 inches, and for which due allowance is to be made when comparing other standards."

### British Events

A dispute over beef prices between the governments of Argentina and the United Kingdom which had lasted more than ten months has now been settled. Once again Great Britain will begin to get supplies of Argentine beef, at prices much higher than the authorities had formerly been willing to pay, although somewhat less than Argentina had asked for. An immediate result will be to put beef once again on tables in Great Britain from which it had long been absent.

The outcome of the dispute may have some bearing on Canadian interest. Had it not been settled, or had it continued very much longer, the whole plan of the present government of Great Britain for bulk purchasing of imported food supplies might have been imperiled. Already that plan has been modified in some respects, perhaps most notably by its abandonment in respect to tea, which henceforth is to be obtained through the old system of tea auctions in London.

There is no present bacon contract between Canada and the United Kingdom, mainly because the government of the latter country was not willing to pay a high enough price to ensure getting supplies in Canada. It is just possible that there may be some readjustment of ideas in that respect, now that Great Britain has found it necessary to pay a higher price for Argentine beef than was formerly acceptable to the U.K. government.

Political developments in Great Britain may also have an effect upon the purchase of food supplies from Canada. The death of Ernest Bevin and the resignation of Aneurin Bevan, formerly regarded as two of the strongest men in the Labour Cabinet, as well as resignation of some less important members of the Ministry seemed to threaten the tenure of office of the government, and to make an early election probable. Should such an election result in the defeat of the

government and a return to power of the Conservative party, some changes in policy would be inevitable. Some persons would think it likely that the system of bulk purchase of foods, which has been regarded as Socialistic, might be abandoned. If so, Canadian producers would have to adjust themselves to a new situation.

### U.S. Wheat Crop Prospects

United States Department of Agriculture recently came out with an estimate of winter wheat production of 727,000,000 bushels. That is 150,000,000 bushels below the estimate of last December, so quite evidently some extensive damage to the crop has been recognized by the authorities. Some private crop observers, however, are insisting that the Department of Agriculture has not taken into account the full extent of damage that has been done, or is immediately in prospect, from widespread infestation by green bugs. One private estimator claims that nearly 20,000,000 acres of winter wheat have been practically destroyed on this account. Earlier there had been a good deal of nervousness about prospects for winter wheat on account of prolonged dry weather. Recent heavy rains, however, materially improved moisture conditions, and the green bug menace is now the most serious danger menacing the crop. Quite probably the growing season will have to continue for some weeks before there is general agreement as to how serious the infestation really is.

Where fields seem likely to experience total destruction, no doubt there will be a good deal of reseeding, mainly to corn.

This situation is adding some strength to grain markets in the United States. Another bullish factor has been the lateness of the seeding season for oats over large areas, mainly because of snow or rain. In the central States farmers like to have their oats well advanced at an early date, so the crop may be well advanced toward maturity in the hot days of midsummer. Markets in the United States do not appear to be very much concerned over the fact that Canada at the end of this crop year will have a large carryover of lower grades of wheat, mainly suitable only for feed, for which a continuing outlet will be sought in the United States. Indeed, with high prices prevailing for livestock, anxiety is felt for fear the total supply of feed grains might be insufficient, and no one seems to worry about a possible surplus position in respect of feed.

### Box Car Situation

On April 4 representatives of western farm organizations sent a telegram from a meeting at Regina to the Minister of Transport urging the need for more rapid transportation of grain. These organizations included the Federations of Agriculture of Manitoba, Saskatchewan and Alberta, the Farmers' Union, the Wheat Pools and United Grain Growers Limited.

The telegram stressed the danger that millions of bushels of wheat still on farms would be seriously damaged unless they could be got into safe storage. It also dealt with the need for more rapid delivery at ocean ports of wheat for export. Unless Canada seized present opportunities to sell wheat, there was danger of loss of markets. Shortage of rail transport was described as a national emergency.

**MACDONALD'S**  
**BRIER**  
*Canada's Standard Smoke*



# The Countrywoman

## LOVE

MAHAL, who sat alone upon the far hills, looked at two pine trees and said:

"Your roots are twined together in the earth, but you stand quite apart. One does not lay a shadow on the other. Sun and wind are shared equally and the rain falls upon each in the same measure. So it should be in love.

"The desire for possession is weakness, not strength. In it there is uncertainty and doubt and all the shouted songs of fear. If we stand so that our shadow falls upon another, the time will come when we shall bear the full force of the wind and the lightning will not spare us.

"There is no true possession of the body; it is a gift given freely and in joy. He who would own the body of another will go down to death thinking that life was a bitter, unripened fruit. And he who would possess the soul of another will go down to death cursing his empty hands and crying out for his own lost soul.

"Your roots are twined together, O pines, and so must there be agreement on the fundamental things. There must be sharing, so that our spirits may be nourished and grow strong. We should learn to say the sweet word 'our' gladly and completely.

"But we should say 'my' also and when one withdraws from the other into the fastness of his own soul it will be as though he went to a far country in search of riches. The jewels of his personality will be increased and shine in splendor for the loved one. Then will the reunion between these two be such as might be written into the annals of Heaven."—Gilean Douglas.

## Investment in Leadership

THIS month and next will be marked by the holding of many rural women's conventions. Annual meetings serve to bring out reports of activities of the past year, contacts made, and the setting-up of program and policy for the coming twelve months.

Delegates going to district and provincial conventions have an opportunity to arrive at a better understanding of current opinion on many subjects of the day; to gather new ideas for their own local community work; get new viewpoints and meet many leading personalities. But the experience is more than just a break in the usual routine at home, a holiday to a nearby city, for theirs is the responsibility of attending business sessions and bringing home a story of the meeting. They gather new ideas and fresh inspiration for their own club's work, whether that be in the field of crafts, libraries, drama, education, public health or welfare. They gain further insight into how the activities of their small community tie in with those of the province and Canada as a whole.

In the interval between annual gatherings, the leaders and officers of the association have put much time, thought and work. They take their duties seriously and render unselfish service for the good of the organization they represent. They must be alert, attend many meetings and represent the general membership on other committees and boards. Their reward may come in a sense of the privilege of such representation; of doing necessary citizenship tasks; of being informed on policy and progress.

Too often this unselfish giving of time and service is accepted casually. Organizations raise many thousands of dollars in funds during a year. Some of them should be definitely earmarked for investment in experience for their leaders, to pay expenses for attendance at provincial, national and even international meetings. There is a great need for wise and informed leadership today. Ours truly is an age of ideas in conflict—the greatest, possibly, in the history of mankind.

Of recent years, organizations have been urging the appointment of women to policy-making boards and positions, provincial and national. They must

*It seems in keeping with the mood of May that we let our thoughts roam over topics, both varied and informal*

by AMY J. ROE

do their share in discovering women with the talent and ability necessary for such positions and after finding them, give them experience in leadership and program building.



*Japonica blossoms offer May greeting.*

## On Borrowing

HOW do you train a child to be considerate of the property of others? Our grandmothers did not know much about psychology but they had their own ways of meeting such a point in family living. A little bulletin, edited by Lucille Shearwood, came to our desk recently, containing the following charming little story:

In Grandmother's time, Uncle Liege Hinman wasn't the nearest neighbor, but everyone counted him the wisest. And he had the most remarkable laugh. When he tossed back his head, and placed left thumb and forefinger on his nose, the sound of his pleasure echoed across the meadows to us on the porch after supper.

This quiet August day in Uncle Liege's library, I was carried away by the sketches in a worn book

## An Epitaph

*He did not have time to hear  
The silver of a veery's songs.  
And now his life-unsensing ear  
Is deaf for long.*

*He did not mark the swallow's flight,  
Or bloodroots blossoming in May.  
And now the miracle of sight  
Is fled away.*

*He never knew a love expressed  
Within the eyes of any beast.  
Now the beating of his breast  
Forever ceased.*

*The wild geese fly against the sun,  
In tamaracks the veeries call.  
And he is gone, his life is done;  
Almost he never lived at all.*

—ALAN DEVOE.

and asked permission to borrow it. (Granny didn't always hold with borrowing.) With a word of caution on handling the tattered cover, the old gentleman sent me off with the book plus two thick, square gingerbread cookies from the bottomless stone crock in the pantry.

When Granny saw the book, she tied on her apron and went briskly to the kitchen—not to start supper, but to make flour paste. Out came thriftily saved butcher's paper. One strip mended the binding. While this was drying, Granny cut a pattern and neatly fitted the old book with a complete cover. Regarding her work with satisfaction, she said: "When it's all healed, you may read it. Carefully."

"It's like a new overcoat, Granny."

"Books can be hurt like people."

Came a warm evening when I took the path under the elms, over the brook, watching each step, mindful of thanks to be spoken right up, mindful of the mended brown book and a jar of sour cherry conserve. (Borrowers must return with interest.)

Uncle Liege was cracking black walnuts. He sat back, his furrowed face lighting up as he turned the brown-covered book with gentle hands.

"Now just remember this, my girl, you've learned something. Other folks will always be ready with help, once you've proved that you're as quick to take care of their property as you are to make use of it."

## The Affirmative

WHEN one contemplates the so-many ways of expressing agreement, consent and affirmation, the stage seems set for a world of benignity and peace. Except, of course, that there is an equal number of words and phrases expressing disagreement, refusal and negation, but with these the present meditation is not concerned. A good lawyer, retained to see only the front of the house, is in no wise concerned with the sides and back.

But consider the differences in the affirmatives of the nations, the distinct ethnic flavor of each, subtle, potent, with a hint of withdrawal. (And of arms?)

The Italian "Sì," of an everyday compliance, has the swift sibilance of a warning, a gleam of dagger-point. "Ja"—listen to it!—like the dropping of lead into glue. The French "Oui" is said all soft and round and red and yielding, but they too have "Si" with which to meet a negative, and "Voilà!" for finality.

Our "Yes" starts softly, but ends like a yard of calico torn across a counter. "Yea" has solemnity, is ceremonial, is spotted of the law. "Ay"—one likes "Ay"—so straightforward and up-and-down and, if you like, a softness of caress on the very last tip of sound. A Scot can make it very arrogant with a swing of the sporran through the first spaces of its speaking.

Your Irishman occasionally uses a meditative, commentative "Ay," but usually he prefers a whole challenging phrase: "I do," "I am," "I will," swelling to the full the dictionary definition of "affirm"—"to tell with confidence, to assert positively."—Nan Moulton.

Summer picnics is the theme of a new series of radio talks over CBC on Wednesday afternoons, beginning early May. Women of different countries will describe family outings, making special mention of favorite foods and how they are stored and served. Speakers in Great Britain, Liberia, Belgium, Japan, New Zealand, Uruguay, Iceland, Norway, Sweden, Italy and several other countries have been invited to take part.

Dr. S. R. Laycock, popular writer and lecturer, will commence a new series of summer talks on CBC network, on Tuesday evenings, entitled "Links with Life." Dr. Laycock is Dean of Education, Saskatchewan University and president of the Saskatchewan division of the Canadian Mental Health Association.





Girl Guide leader canoeing at Caddy Lake Camp. C.G.I.T. campsite at Brereton Lake, Man.



# Summer Camps

*Camping provides a pleasant holiday for young person or child—you may make a choice among the camps established—or work toward your community having one of its own—some things about accepted programs, standards and technique—sources of information*

**D**O YOU plan on sending your child to camp this summer? Then you will want to know something about the various types of camps for different age groups, their standards and the leadership provided, also something about what the experience is likely to mean in a child or young person's life.

The opportunity to go to camp may come as a reward to a child or youth for achievement along some particular line of endeavor, such as is offered through boys' and girls' clubs. It may be that an interested teacher, minister, friend or leader recognizes that a youngster has latent talents and skills which could be developed and brought out by mixing with others of his or her own age group. Wise parents may deliberately seek out some plan of a holiday away-from-home knowing that it will broaden a child's horizon, give him experience in getting along with others of his own age and train him in self-reliance.

It may happen that your child has set his mind on going to a camp, especially if some of his friends are going, dreams of its pleasures, is of a venturesome turn and gives you no peace until you consent to his going. On the other hand a child or young person may be timid about new experiences and need some encouragement, even urging, to go for the first time. After all if he is to learn to swim, manage a boat or canoe, cook meals in the open and handle camping equipment, and learn to work and play with his fellows, he might as well learn these things under competent direction.

Summers are short and precious in this part of the world. Country children, it is true, get much outdoor experience and come to know, naturally, many of the things learned at camps. This delightful season of the year should not be one of work alone for children, especially during the impressionable years, when they are at the period of most rapid physical and emotional growth. Companionship, play, healthy activity, followed by rest and dreamy leisure and mental stimulation are as necessary as good food. A camp providing such against a pleasant setting, during summer days, will serve to leave many happy and lasting impressions on a

young person's or child's mind.

"On the farm, in our family, little thought was given to the idea of us, as children or young adults, going on a holiday," a young woman remarked recently. "The day after school closed we started in weeding the garden. There seemed to be a hundred jobs waiting for us to do. Even today when there are a number of camps, trips and jaunts arranged with special interests for rural boys and girls, there is difficulty in persuading farm parents to let their boys and girls go, although they are assured of good supervision and leadership while away from home."

A camp may be small with possibly 20 to 30 campers accommodated, taking in turn the various age and sex groups. Or it may be large with some 100 boys or girls attending for a given period of time. A camp may last for only a few days, a fortnight or a month. Large or small, nearby or distant, it should be in an attractive setting, close to water and surrounded by trees. There should be ample scope for exploration trips and nature study.

Some organizations such as the Y.M.C.A., Boy Scouts, Girl Guides and certain church youth groups have established camps and many years of experience in conducting a well-rounded program and providing leadership. It is not possible to list them here or to describe particularly interesting features of their activities. They are well known within their respective provinces and are prepared to furnish information upon request.

**F**EW people realize that there is now the Canadian Camping Association with Mrs. Agnes Mutchler, secretary at headquarters, Room 211, at 771 Burnside St., Montreal. There are also provincial camping associations in almost every province in Canada. The Manitoba Camping Association works through the Boys' Division of the Y.M.C.A., Winnipeg. It has published a directory of camps within the province and for the past three years conducted a Camping Institute.

The over-all and important purpose of such an organization is to further the interest and welfare of children, youth and adults, through camping as an educational and recreational proj-

ect in view of the great possibilities for character training and development of experience for the individual. Other purposes stated are: (1) To promote among its members co-operativeness and good will in the various fields of camping; (2) To foster and make known to the general community, the best accepted standards, policies and practices of camping on two levels; to counsellors and to staff. It offers a service of supplying information, advice on games and purchase of equipment, pooling knowledge. It helps to create a sense of fellowship among those who work in this field.

Most of the leading church denominations, Roman Catholic, Anglican, United, Baptist, Salvation Army and Lutheran, as well as others, have their own special summer camps. Service clubs such as Elks, Kiwanis, Rotary, etc., sponsor or support camps or may combine in some cases to help a particular camp along. In Winnipeg alone there are some 45 service and community clubs who sponsor or direct recreation and character-building projects. The story is much the same in the other provinces. This work has been greatly stimulated in recent years because of the appointment of provincial directors of physical training and recreation. In three of the western provinces, the director works as a member of the department of education, while in Manitoba Mr. Hart Devenney is a member of the staff of the department of Health and Public Welfare.

Under the program as set up, leadership training is given in physical training and recreation activities, especially to teachers in service or at normal schools. Local communities, churches and others may arrange short-term leadership courses and theirs will be the responsibility of providing the meeting place and the audience.

**1. Jean Kerr leads group discussion at junior M.F.A.C. Crawford Park Camp on Clear Lake.**

**2. Manitoba Girls' Club enjoy outdoor meal at Beausejour.**

**3. Chapel hour at Y.M.C.A. Camp Stephens boys' camp, Lake of the Woods.**

Speakers will be provided on request as well as adjudicators for drama, music or folk dancing, and handicraft competitions. Any community wishing to start a recreational project can secure "How To Do It" scripts, films and books on the subject from the director's office.

If your locality is fortunate in having a good natural campsite or recreation center you may draw on these resources. They will serve to bring you up to date on what are the best accepted techniques and methods. It will point out a way in which leaders may be trained.

Each province through its agricultural extension services provides summer camp ideas and these include jaunts and rallies. For example, in Manitoba there is a four-day boys' camp at the Provincial Exhibition at Brandon, where some 100 boys are housed in the agricultural school. The boys attend the fair, visit the Dominion Experimental Farm, take part in livestock judging competitions, see demonstrations and have some recreational hours. The Junior Seed Growers, some 75 in number, have for a number of years past enjoyed an annual June trip to Winnipeg which is a holiday and educational experience for them.





Through the Girls' Clothing Clubs four one-week camps are arranged at lake-side spots for girls who have won high standing in achievement in club work. They have a recreational program of physical training, folk dancing, swimming, handicrafts, as well as instruction in textiles and in conducting business meetings. Other prairie provinces carry out somewhat similar programs, some of which include visits to fairs.

**T**HE Manitoba Federation of Agriculture and Co-operation now owns its own four-and-one-half-acre camp-site at Crawford Park, on Clear Lake in the Riding Mountain area. Camps are conducted for young rural people from 17 to 37 years of age; for a younger 13 to 16 years of age group and for juniors from 10 to 13 years of age. There is a sports and handicraft program, special speakers and opportunities for discussion groups on matters relating to farm living and business.

Alberta's Banff School of Fine Arts has won continent-wide fame and attracts many tourists and visitors from other provinces and the United States. That province has also featured schools of community life at agricultural colleges and has attracted young people and adults from farming communities. Both Saskatchewan and Alberta have had success with camps which afford a short holiday and mental stimulation through lectures and discussions.—A.J.R.

## Vignettes for Variety

by EFFIE BUTLER

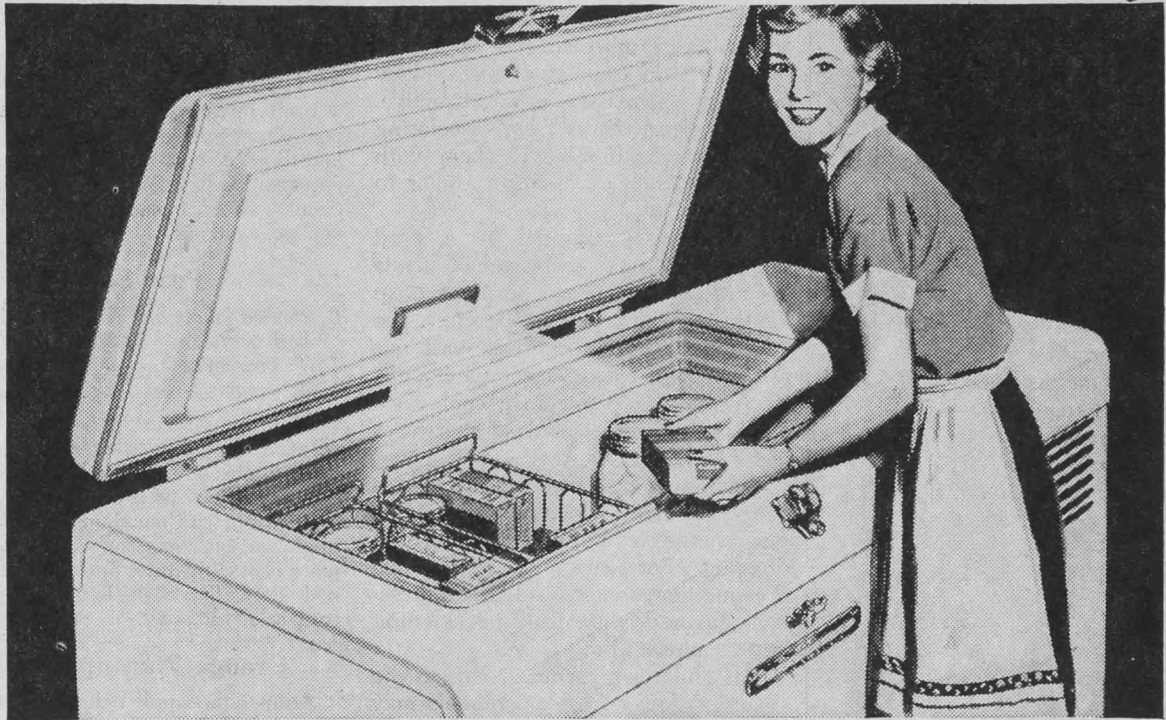
**B**OYS and girls, if you are wondering how to make a pretty design for the cover of your art portfolio, a greeting card or a folder for your party invitation, try what the engravers call Vignettes. It is really much easier than it sounds for it's simply sponge painting.

All you will need is a small piece of sponge about the size of an egg and some tempera paint or water colors. If you haven't a sponge, a narrow strip from the top of an old cotton stocking will do. Roll it up tightly, the way Mother rolls a jelly cake, and fasten with an elastic band.

Cut out any pattern of daffodils, tulips, leaves or birds that you like and lay it on your card or folder. Now dip your sponge in the tempera and press out the excess paint. Hold your pattern in place. And here's where you must use care. Don't let it slip. A few very sharp pointed pins stuck in at the edges will help. Now blot all over the pattern with the wet sponge. Be sure you don't miss any of the tips or edges.

Now lift the paper pattern off carefully so as to not smudge the edges and you will have a clean-cut transfer of your leaf or flower design. Variations may be had by blotting heavily on the pattern edge and filling in the rest of the card or folder with a very light spattering of the wet sponge. Use soft pastel tones, yellow and mauve on an Easter card, bright red and green for a Christmas card, soft blue, rose or green for a Mother's Day card and you will be delighted with the results.

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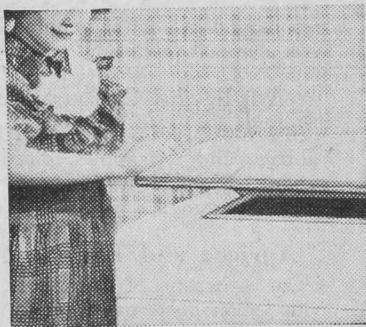
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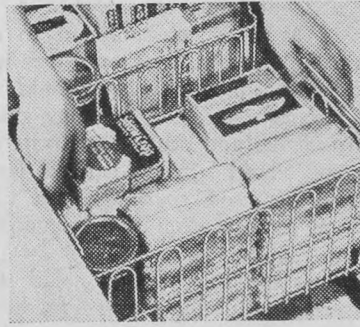
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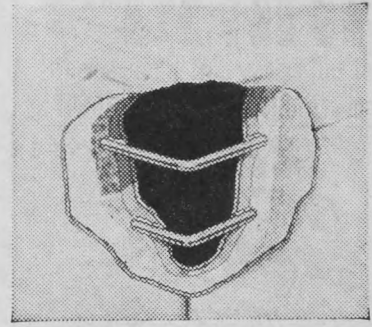
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SW-181

## Fruit Salads

*add new flavor and color combinations to early spring meals*

**S**PRING is here at last. Until the first spring vegetables are ready, let light and refreshing fruit salads add spring colors to your meals. Make them of citrus fruits, apples and home-canned fruits. Let them be crisp and cool, interesting in form and tasty. Your family will enjoy them now more than ever.

Color accent depends upon the selection of ingredients. A dab of jelly or strawberry jam, bright green celery or cabbage, unpeeled red apples or bright gelatin touches of red, yellow or green will make a salad attractive. To keep fresh fruits from discoloring during preparation cover them with fruit juice, salad dressing or sugar to exclude the air.

Crispiness is essential for a good salad. Even when soft canned fruits are used the salad can be made crisp by the use of crisp lettuce cups, the addition of apple, cabbage and nut mixtures, or celery accompaniments. Keep the ingredients in a cool place and assemble the salad as shortly as possible before serving.

The tangy flavor of a salad comes mainly from the dressing. The recipe given here is for a rich, subtly flavored dressing. For variety serve French dressing, mayonnaise and boiled dressings flavored with fruit juices, mint or seasonings, also.

For children's parties, salads in the shape of flowers, fish or animals may be fine, but they are usually not considered suitable to serve adults. Arrangements should be orderly but should not look fussed over. When using canned fruit it is essential to keep the shape of each piece distinct. Canned fruits break up very easily so handle them carefully. Mushy salads are not only unappetizing in appearance but flavorless. The ingredients, if cut in small pieces, look more attractive in a compact mound in the center rather than spread out over the entire surface of the salad plate.

Fruit salads go well with main dishes containing cheese. But when served as an accompaniment to the main course a salad should be light and simple. The dressing should not be too rich and the servings small. Citrus fruits and other acid fruits are a good choice. Sweet canned fruits should be used sparingly and then only in combination with something crisp.

Large servings of fruit salad may be served as the main course for lunch or supper, especially if they contain nuts or cheese. The dressing on main-course salads can be richer. Served with hot breads or other fancy breads they make a very satisfactory meal.

Any salad can be served as a dessert. If the main course is light use a rich salad dressing with the fruit. If the main course is filling serve a molded fruit salad or fruit cup and pass the dressing.

In salad making more than in the preparation of any other food, individual preference and the foods on hand will be your guide. Combinations of ingredients, the amount of seasonings used and the size of serving depend on you. The recipes given here are a guide—modify them, as you wish, to use up the leftovers and to meet the special tastes of the family.

### Mixed Fruit Salad

- |                             |                                    |
|-----------------------------|------------------------------------|
| 1 T. gelatin                | $\frac{2}{3}$ c. sweet fruit juice |
| $\frac{1}{4}$ c. cold water | Lettuce                            |
| 2 T. lemon juice            | Fruit salad dressing               |
| 1 c. diced fruits           |                                    |

Stir cold water into gelatin in top of double boiler; let stand five minutes; dissolve over hot water. Add lemon and fruit juice; add sugar only after tasting. Set the double boiler in cold water until the mixture is the consistency of unbeaten egg whites. Stir in fruits which have been cut up and drained thoroughly. Mold; chill until firm. Unmold on lettuce leaves and serve with dressing.

Fruit mixture may be:  $\frac{1}{4}$  c. each of pear chunks, halved grapes, orange slices and diced celery;  $\frac{1}{2}$  c. each of grapefruit slices and celery;  $\frac{1}{4}$  c. each of pineapple chunks, sliced bananas, diced red apple and pear chunks.

### Pear Salad

- |                              |                    |
|------------------------------|--------------------|
| 6 canned whole or half pears | 1 T. mayonnaise    |
| 1 T. pear juice              | 3 oz. cream cheese |
| 1 T. cream                   | 2 T. chopped nuts  |
|                              | Lettuce            |

Drain pears; cut in half and remove cores. Add pear juice, cream and mayonnaise to cheese and blend. Fill centers of six pear halves with part of cheese mixture. Cover with remaining pear halves in sandwich fashion. Top each pear with more cheese mixture. Sprinkle with chopped nuts. Serve in lettuce cups with fruit salad dressing.

### Orange Pineapple Salad

Arrange pineapple half slices on a plate with the corners meeting at the center of the plate. Place orange sections over pineapple so they appear as a half orange. Garnish with greens, olives or pimento strips. Pass fruit salad dressing.

### Snowball Salad

Drain canned peach halves or apricot halves. Fill halves with cottage cheese or cream cheese. Place halves together. Roll in shredded coconut. Serve in lettuce cups. Top with mint flavored dressing.

### Apple and Celery Salad

Wash and dice, without peeling, four red apples. Add an equal amount of diced celery. Moisten with salad dressing. Heap in a mound in a lettuce cup and sprinkle with chopped walnuts.

### Apple and Cabbage Salad

Mix together  $1\frac{1}{2}$  c. each of shredded cabbage and red apples, diced without peeling. Sprinkle with lemon juice or French dressing.

### Apricot and Banana Salad

Cut a banana in thin slices, sprinkle with lemon juice and arrange in a ring on lettuce. Top with a half apricot that has been rolled in coconut. Serve with French dressing or pass fruit salad dressing.

### Apple Star Salad

Cut each apple in sixths to within  $\frac{1}{2}$  inch of the bottom. Stuff with a mixture of cream cheese, nuts, celery and mayonnaise. Sprinkle with chopped nuts. Pass extra mayonnaise.

### Fruit Salad Dressing

- |                          |                      |
|--------------------------|----------------------|
| 3 eggs                   | 1 pint whipped cream |
| $\frac{2}{3}$ c. vinegar | 1 tsp. dry mustard   |
| 1 T. butter              |                      |
| 2 T. sugar               |                      |

Beat egg yolks; add vinegar. Mix the mustard with the butter and sugar; add the egg yolks and vinegar. Cook the mixture in top of a double boiler until cooked, then add beaten egg white. Let cool; add whipped cream.

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handy, too, for cuts,  
bruises, scalds,  
coughs and 101  
other home  
uses.

INSIST  
ON THE  
GENUINE

**Vaseline**  
TRADE MARK  
PETROLEUM JELLY

AT ANY DRUGGIST; OR FROM YOUR MAIL ORDER HOUSE

ing of liquid polish should help greatly to overcome the condition. The additional use of a nail cream will do much to prevent this condition. If you prefer, use a colorless nail enamel or a faintly tinted one. Before putting on the polish, use either a chamois buffer or the palm of your hand for buffing your nails vigorously. This stirs up circulation through the fingertips and aids nature in preserving the smoothness of the nails. Let the first application of polish dry, then make a second. Since the nails grow from the finger (instead of the nail tip) you will find daily applications of nail and cuticle cream helpful in making the new growth strong. Massage the corrective cream over the cuticle and nail every night before going to bed, allowing the remaining covering to stay on until morning. This should bring a noticeable improvement in a few weeks.

**Question:** My scalp and hair seem always to be oily. It is almost impossible to dress my hair because of this oily condition four or five days after it is washed. I have been told that I wash my hair too often (every three weeks) but it seems necessary to do this in order to comb it nicely. Do you know how I can overcome this condition of hair? My scalp is never free from dandruff and oil, too.

**Answer:** More frequent shampooing is the simple solution to your hair and scalp problem. Any of the good shampoos available in your local stores will bring a marked improvement within two or three weeks. After brushing your hair thoroughly, follow the simple directions for shampooing. Rinse all soap or shampoo from your hair. Then use a clean, dry towel and rub most of the moisture from your hair. Let your hair dry naturally. Be sure that you wash comb and brush every time you do your hair. Shampoo your hair thoroughly every five days or at least every week until the condition improves. In any event it may be necessary to shampoo your hair every week or ten days. This will certainly overcome the unattractiveness of your hair and the oily, dandruff condition of your scalp.

**Question:** I have never given myself a home permanent and am wondering if there are any tricks I ought to know before undertaking it. A friend of mine gave herself a wave and it is too kinky. Is there anything that can be done about this, too?

**Answer:** The complete directions that accompany each package of permanent waving equipment should be followed to the letter. These directions are actually "foolproof" and if followed correctly the result is certain to be a perfect permanent. The chances are your friend left the curls up too long for her type and texture of hair. Be sure that you know your hair, then follow directions made for it. Also be sure your hair is well shampooed and all cleansing agent removed. Let me emphasize the importance of following the directions that accompany your package of permanent waving equipment. The use of a vinegar rinse after the shampoo will make your friend's hair easier to handle and help straighten its kinkiness. Use one-fourth glass of vinegar and three-fourths glass of warm water. Pour this over the hair after it has been shampooed and rinsed. Then use a clear water rinse.



**If you bake at home—  
these are easy to make**

It's bound to be a "Good Morning"—when you serve delicious, hot-and-fragrant Cinnamon Buns for breakfast. They'll win you plenty of praise . . . made with Fleischmann's Fast Rising Dry Yeast!

**Full Strength—Goes Right to Work**

Modern Fleischmann's Fast Rising Dry Yeast keeps for weeks and weeks right on your pantry shelf. It's fast—it's ACTIVE. All you do is:

1. In a small amount (usually specified) of lukewarm water, dissolve

thoroughly 1 teaspoon sugar for each envelope of yeast.

2. Sprinkle with dry yeast. Let stand 10 minutes.
3. THEN stir well. (The water used with the yeast counts as part of the total liquid called for in your recipe.)

Next time you bake, insist on Fleischmann's Fast Rising Dry Yeast. Keep several weeks' supply on hand. There's nothing like it for delicious soft-textured breads, rolls, dessert breads—such as all the family loves!

**CINNAMON BUNS**

Makes 2½ dozen

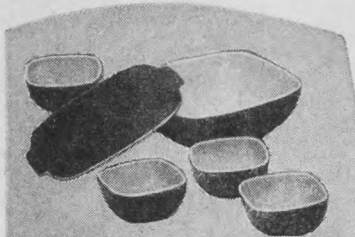
Measure into large bowl  
1 cup lukewarm water  
2 teaspoons granulated sugar  
and stir until sugar is dissolved.  
Sprinkle with contents of  
2 envelopes Fleischmann's  
Fast Rising Dry Yeast  
Let stand 10 minutes, THEN stir well.  
In the meantime, scald  
1 cup milk  
Remove from heat and stir in  
½ cup granulated sugar  
1¼ teaspoons salt  
6 tablespoons shortening  
Cool to lukewarm and add to yeast mixture.  
Stir in 2 well-beaten eggs  
Stir in 3 cups once-sifted bread flour  
and beat until smooth; work in  
3 cups more once-sifted bread flour  
Turn out on lightly-floured board and knead dough lightly until smooth and elastic. Place in greased bowl, brush top with melted butter or shortening. Cover and set dough in warm place, free from draught. Let rise until doubled in bulk. While dough is rising, combine  
1½ cups brown sugar  
(lightly pressed down)  
3 teaspoons ground cinnamon  
1 cup washed and dried seedless raisins

Punch down dough and divide into 2 equal portions; form into smooth balls. Roll each piece into an oblong ¼-inch thick and 16 inches long; loosen dough. Brush with melted butter or margarine. Sprinkle with raisin mixture. Beginning at a long edge, roll up each piece loosely, like a jelly roll. Cut into 1-inch slices. Place just touching each other, a cut-side up, in greased 7-inch round layer-cake pans (or other shallow pans). Grease tops. Cover and let rise until doubled in bulk. Bake in moderate oven 350°, 20-25 minutes. Serve hot, or reheated.





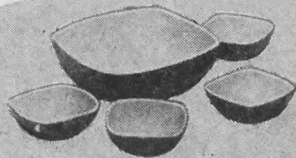
# Have you all these PYREX dishes?



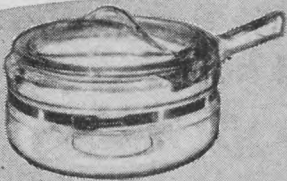
NEW PYREX HOSTESS SET—in colour!  
48-oz. covered casserole with 4 indi-  
vidualramekins. Red or yellow. \$3.95



PYREX "FLAVOR-SAVER" PIE PLATE—High  
fluted edges keep juices and flavors in  
your pie.  
9-inch size 80¢ 10-inch size 95¢



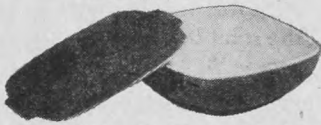
PYREX HOSTESS OVEN-AND-TABLE SET  
—80-oz. open bowl with four 12-oz.  
individual dishes. Set in red or  
yellow. \$3.95



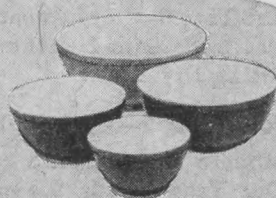
PYREX FLAMEWARE SAUCEPAN — You see  
what's cooking, see it turn out right!  
32-oz. size \$2.75 48-oz. size \$3.25  
64-oz. size \$3.50



PYREX UTILITY DISH—Bake in it, serve  
in it! It's useful a dozen different  
ways. Small size 95¢, medium size  
\$1.25, large size \$1.40.



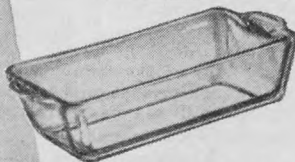
PYREX HOSTESS CASSEROLE—in colour! Casserole  
with cover, in gay red or sunny yellow.  
Medium size \$2.75, large size \$3.15



PYREX COLOUR BOWL SET—  
Four bowls — for mixing,  
baking, serving. Colours—  
yellow, red, green  
and blue. \$4.15

Nothing so tempting as the sight of good food when it's cooking! When you use your Pyrex Ware you can see the moment your food is done. And when it's served in the wonderful new Hostess sets—it looks as good as it tastes! You'll enjoy using every one of the gay, colourful Pyrex Ware dishes. Remember—no odors . . . no stains when you cook with Pyrex!

Go to the Pyrex Counter at your favorite store and buy the ware you need. Every week add one or two more of the many different shapes and sizes of Pyrex dishes to your cupboard shelves.



PYREX LOAF PAN—Bakes  
your meat or salmon loaf  
—serves it in style.  
Medium size 95¢  
Large size \$1.25



*If it's Pyrex Ware  
the trade-mark is on it*

## PYREX

OVENWARE AND FLAMEWARE

All PYREX is guaranteed Against Heat Breakage for Two Years

PYREX WARE a product of CORNING GLASS WORKS OF CANADA LTD.

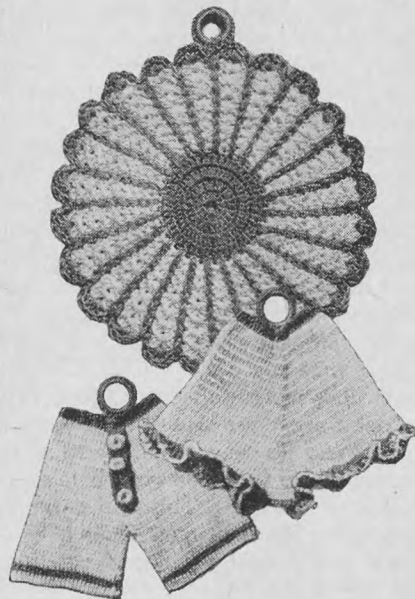
"Pyrex" brand is the registered trade-mark of Corning Glass Works of Canada Ltd.

## Crocheted Popcorn-Stitch Set



Design No. C-358.

For a specially nice set for a specially nice tot, we think you will like this bonnet with a peak and the pretty jacket to match. Small rosebuds are embroidered in color inside the diamonds. A pretty christening gift. Pattern is No. C-358. Price 25 cents.



## Crocheted Pot Holders

Design No. C-355.

Interesting and amusing . . . gay and saucy . . . but one of the most popular ideas we have ever seen for bazaars and money-making projects. We used ordinary white cotton carpet warp and trimmed them with blue and red. Three designs are in the one pattern which is No. C-355. Price 25 cents.

Address orders to The Country Guide Needlework Department, Winnipeg, Man.

Note the price of each item.

Enclose right amount to cover order.

## Quilting is a Family Home Craft



Design No. Q-105.

Mother, grandmother, aunt and even 'teen-age sister can help with this fascinating quilt. It is the traditional Star of Bethlehem design and is one of the most popular and most often requested of all quilt patterns. Plain or printed materials are equally suitable. If preferred, all blocks may be pieced but alternated pieced and plain blocks with the quilting done in the old-fashioned "feather" design, as illustrated, is particularly effective. Pattern Q-105 includes directions for cutting

patterns, methods of piecing, yardages, etc. Price 30 cents.

For a pamphlet of quilt designs, including many of the well-known old favorites, order No. Q-115. Price 25 cents.



**F**EW things are as disappointing as materials that fade, "bleed," or lose their original brightness. They leave you out of pocket and force you to spend precious time and energy in making replacements.

Protect yourself against these losses by purchasing only those fabrics guaranteed to be fast to washing, sunlight and perspiration. Look for labels giving facts about the fabrics; sometimes information is stamped on the selvage. If these are lacking, ask the clerk or the management for assurance about the dyes.

If it comes to a choice between a fabric that is labelled and one that is not labelled, take the guaranteed goods if possible. It will be cheaper and more satisfactory in the end. A manufacturer who produces a superior article is always anxious to tell you about it. Save the label for future reference and follow the directions for washing.

Nowadays it is possible for manufacturers to secure a wide range of reliable dyes that will withstand washing, sunlight and perspiration. Further, they know how to fix the dyes securely to the fibres so that the goods will remain bright and clear for the life of the garment, provided reasonable care is taken in laundering.

In view of these facts why do poorly dyed goods ever appear on the market? It is largely a matter of cost, and of the price people are willing to pay. The best dyes are more expensive than poor ones. To fix dyes securely on the material requires many processes. If there are several colors, the cloth costs more to produce than if there is one color only.

## Keep the Color

*Careful laundering saves money*

by MARGARET M. SPEECHLY

The more steps in the manufacture and the greater the skill required, the higher the costs will be for labor and material. To meet these, the manufacturer must charge more per yard than he would do for poorly dyed materials which can be turned out in less time and with less skill.

Some of the most serviceable colors for cottons, linens and rayons are called vat dyes. They are tub-fast and will withstand sunlight. "Everfast" on a label is a guarantee that the colors are resistant to fading and washing. This process is used only on cloth of high quality so that the material can be relied on in other respects.

Once you have invested in colored washables, you need to protect them from harsh treatment because there is no dye that can be considered 100 per cent fast under all conditions. If the label states that the material is hand-washable, follow the manufacturer's directions.

The busier you are, the less you want to be bothered with fabrics that need special care, but if someone has given you an apron or other article made of colored goods, test it first by briefly soaking it in cold water. This prevents trouble with dyes that run (called fugitive) and also gets rid of dressing.

Keep rinsing until the water is clear because loose dye can ruin the wash-

water and rinses, and may streak all the other clothes. Do not waste time trying to "set" fugitive colors with salt or vinegar in the old-fashioned way. Experiments have shown that such measures are useless if the material has been poorly dyed.

Colored goods guaranteed tub-fast can stand the same temperatures in the machine as white clothes, but if there is no assurance about the dyes, they are likely to be damaged by hot water. Strong soaps and cheap washing powders will dim even the fastest colors and are therefore to be avoided.

It is doubtful whether it pays to wash colored material with home-made soap unless you are positive that it contains no excess alkali. When fat and lye are properly balanced the soap is not likely to be harmful, but if there is any surplus lye, it may attack the colors.

If you use hard water for laundering, you should protect your colored things from the minerals. Soften it before adding any soap to prevent grey soap curds from forming. Give the rinses the same treatment so that soap carried over from the wash-water will not form curds. Week by week these tiny specks can build up a grey film capable of dulling the brightest tones.

You may find that you get better results in hard water if you use synthetic detergents in place of soap.

Whatever you employ, do not skimp on rinses because they are essential for keeping colors bright.

**N**EVER dry colored fabrics in direct sunshine because the powerful rays have a destructive effect on even the best dyes. Each part of the spectrum has an influence on fading, some of the invisible rays being more harmful than the visible ones. Drying clothes in the sun is harder on colors than wearing them in the sunlight, since the moisture in wet fabrics hastens fading. Loss of color is always more severe in humid weather on account of the dampness.

Make it a rule to hang colored articles indoors if you have no shady spot for drying laundry.

Perspiration also destroys colors, the damage done varying with the composition of the perspiration. When wash-dresses fade over the shoulders, the loss is due not only to sunshine, but to the moisture of perspiration and its composition. Buy, if possible, materials dyed with colors that resist perspiration.

You can preserve the brightness of dyes by preventing garments from becoming oversoiled. Ingrained dirt soon dims even the most brilliant tones, and aging is hastened by rubbing or friction.

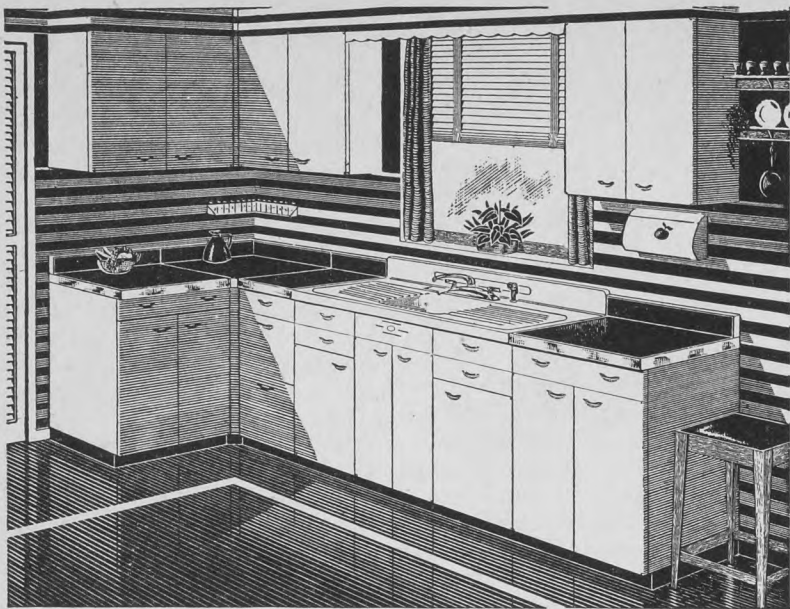
As a general rule, it is risky to use a bleach for colored clothes. However, articles such as tea towels with borders colored by vat dyes, can stand an occasional treatment with a household bleach. Don't forget that the temperature of your iron can cause fading of colors and in some cases may alter the tone of delicate dyes.

**CANADA'S  
LARGEST SELLING  
QUALITY TEA**

**RED ROSE TEA  
IS GOOD TEA!**







## How to Get the Most Convenience for the Money in Your Kitchen!

● Shirley can make life easier in your kitchen two important ways—with its roomier, handier, easier-to-keep-clean Steel Cabinets and Cabinet-Sinks—and with the free Shirley Kitchen Planning Booklet which helps you design your kitchen-layout for greatest convenience.

You'll love the grand, large work surfaces, and host of helpful features built into Shirley units. They actually give you more storage space, better arranged. There are no ledges to collect dust or dirt, and the finish cleans beautifully with the whisk of a damp cloth. Doors and drawers have that sturdy, solid feel . . . work

easily and quietly . . . do not warp or change shape.

Shirley units not only give you more of everything you want, but they actually cost you less. They're expertly engineered, and permanently gun-welded to last you years. They're easy to own, too, the practical Shirley way. Just start with a Shirley Steel Cabinet-Sink, and add a unit at a time, as you are able. You can even install them yourself!

Write for Shirley Kitchen-Planning Booklet and the name of your Canadian distributor. You'll get lots of helpful, practical ideas! Send 10¢ in coin (no stamps, please) to cover handling.



SHIRLEY CORPORATION, DEPARTMENT CG-1, INDIANAPOLIS 2, INDIANA

Handsone, steel Shirley Cabinet-Sinks offered in 5 lengths—84", 66", 54", 48", and 42".



Shirley Steel Base and Wall Cabinets offered in variety of widths and types (for every need).

**MATCHING STEEL KITCHEN UNITS**

*fit any kitchen... a unit at a time... or all at once!*

*Now.. MORE biscuits per package*

**MORE** *popular than ever!*

There is a **CHRISTIE BISCUIT** for every taste

CB-851

## Fellow Has to Fight

Continued from page 14

"I gotta go help a girl write a theme," I explained.

"Well, in that case, sure you can have the car." She smiled at me. "See Jimmy," she went on triumphantly. "You don't have to be an athlete to be popular."

"It helps though," I said.

Mom's sweet. I wish she could see things my way just once.

She sighed and shook her head. "I used to worry so about Sol. He never was president of his class or editor of the school paper."

"He set a record in low hurdles," I answered mournfully.

"It's better to be on the honor roll every month," Mom encouraged.

"Sol could lick every guy in school," I mused, thinking of Bull.

"Oh, Jimmy-boy," Mom said anxiously, pushing her hair out of her eyes in a sort of tired way. "Don't even talk about fighting. Be a gentleman."

"Yes'm," I said, trying not to look at her. When she looks tired and anxious, it just melts my heart, and I'm likely to promise anything.

That evening Betty and I sat in her living room and talked about school. I told her all about myself in a modest way.

"I think its marvelous to be editor of the paper," Betty sighed. "I just adore papers."

"Why don't you help us with the Tatler?" I asked, trying to be non-chalant.

"Oh, Jimmy," she said in an awed voice, "would you let me?"

Would I let her work on the paper? Would I eat peaches and cream? Would I turn down a chance to be premier?

"Well—" I deliberated. "Yes, I think we can find something for you . . . maybe."

Betty looked at me speculatively. "I don't see why you don't play football?" she sighed. "I'll bet you'd be wonderful."

I wanted to see admiration in those pretty green eyes. If athletics would do the trick—Well— I backed my ears and dived in.

"I'm coming out for track next spring," I said.

"Marvelous," she said softly.

AT HOME, I put up the car and strode into Sol's room. He was reading a magazine about farm machinery.

"Look, Sol," I said and flopped down on the chair across the table from him. "How did you ever get Mom to let you come out for track and things?"

Sol laid down the magazine, picked up his pipe and a can of tobacco.

"Well, I didn't exactly get her to let me come out for football and track. As long as I didn't get hurt, she didn't say much."

"Yeah," I sighed sort of hopeless. "Maybe not to you."

Sol looked at me through a cloud of smoke. "Bull Kennedy been rubbing it in on you again?"

"Some," I admitted. "Also there's a new girl in school. Redhead."

Sol said, "Oh."

He didn't say anything else for a few minutes. I picked up the magazine and looked at an ad about a

guy who'd rebuilt himself in 90 days. Shoulders! Ummmm! Narrow waist! Bro-thur! I put down the magazine.

"I put a couple of hurdles down in the pasture so Mom wouldn't worry about them," Sol said. "And I used to run across plowed ground in heavy brogans. Then when I got in light track shoes, I could just about fly."

It sounded good. "I need a punching bag too."

"There's an old cotton sack in the barn and plenty of sand on the creek," Sol said.

"I'll do it," I said.

"I'll coach you," Sol promised.

I got up and walked toward the door. "You've got to quit eating like a horse too," Sol added.

I thought of Mom's cooking. I thought of Betty. Oh, brother, the price you pay!

I was up at five o'clock next morning without any urging from Dad, and I gave the calves a whale of a run as I rounded them up. I felt good.

Yeah, I felt good until time to kiss Mom good-bye as I left for school. She looked so doggone little and sweet and proud of me that I could feel the horns trying to break out of my head.

I was just about ready to give up the whole thing, but Betty was waiting for me after Maths. and we walked down to the English room.

"Everybody says Ralph Kennedy's the star football player," she said dreamily.

"Sure," I griped. "The line opens up a hole you could drive a wagon through and Bull waltzes through and gets all the glory."

"You don't like him much, do you?" she asked.

"Like I like garlic. In its place."

She smiled, but her eyes were thoughtful.

AFTER English class, the hall was crowded, and I wasn't thinking about anything but Betty's sidewise smile. I didn't see Pearl and Bull coming down the hall until I'd bumped into Pearl and knocked her books all over the floor.



"You think you work hard! Have you ever laid an egg?"

Before I could apologize, I felt a hand on my shoulder and Bull hissed, "Hey, look where you're going, you big ape. I oughta beat the tar outa you."

"Take it easy, Bull," I said. "I didn't do that on purpose."

It looked as if half the school had crowded around. Pearl looked scared, but Betty looked happy and expectant.

"Don't get in such a damn rush next time," Bull growled.

"It's a fast life, brother. I'm always in a hurry," I said and pushed his hand off my shoulder.

(Please turn to page 74)



# Attractive at Home



799

No. 799—A home dress in junior sizes. Has all the get-into conveniences and working comfort of a house-dress plus the style of a junior afternoon dress. Sizes 9, 11, 13, 15, 17 and 19 years; 31, 33, 35, and 37-inch bust. Size 13 (31) requires  $4\frac{1}{2}$  yards 35-inch material;  $\frac{1}{4}$  yards trim. Price 25 cents.

No. 798—A classic casual to make little of your hips—with its panelled skirt, front and back. Convertible collar and stand-away pockets are other features you will like. Sizes 12, 14, 16, 18 and 20 years; 32, 34, 36, 38 and 40-inch bust. Size 16 (34) requires  $3\frac{1}{2}$  yards 39-inch material. Price 25 cents.

No. 860—This front-closing dress makes the perfect housedress for the larger woman. Its princess lines are slenderizing, its squared-off neckline is flattering and its front closing is convenient. Sizes 14, 16, 18 and 20 years; 32, 34, 36, 38, 40, 42 and 44-inch bust. Size 18 (36) requires  $4\frac{1}{2}$  yards 35-inch material;  $2\frac{1}{4}$  yards binding. Price 30 cents.

## HOLLYWOOD BILINGUAL PATTERNS



799



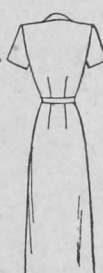
860



817



798



882



1622

No. 882—An easy-going daytime casual you feel right in anywhere, anytime. Have it in your favorite pastel accented with light or dark accessories as the seasons change. Sizes 12, 14, 16, 18 and 20 years; 32, 34, 36, 38 and 40-inch bust. Size 16 (34) requires  $3\frac{1}{2}$  yards 39-inch material. Price 35 cents.

No. 816—A cover-all apron that protects your dress completely except for a tiny peek at the bottom in the back. Can even be popped on over a slip. Sizes 10, 12, 14, 16, 18 and 20 years; 32, 34, 36, 38 and 40-inch bust. Size 16 (34) requires  $4\frac{1}{2}$  yards 35-inch material; 10 yards binding. Price 25 cents.

No. 839—A home frock that goes along with the resolution to "keep trim and tidy looking at all times." Buttons down the front make it easy to get into. Sizes 14, 16, 18 and 20 years; 32, 34, 36, 38, 40, 42, 44 and 46-inch bust. Size 18 requires 4 yards 35-inch material;  $\frac{1}{2}$  yard ruffling. Price 25 cents.

Hollywood Spring and Summer Fashion Book—Contains almost 200 styles suitable for every occasion for spring and summer wear. Each pattern shown contains a complete sewing chart. Price of book 35 cents.

Be sure to state correct size and number of patterns when ordering. Write name and address clearly. Note price of each pattern. Address orders to The Country Guide Patterns, Winnipeg, Manitoba.

No. 1622—This wonderfully figure-flattering dress features a two-tone triangular effect. Have it in a tie print accented with a solid color. Sizes 12, 14, 16, 18 and 20 years; 32, 34, 36, 38 and 40-inch bust. Size 16 (34) requires  $3\frac{1}{2}$  yards 35-inch fabric;  $1\frac{1}{4}$  yards contrasting;  $3\frac{1}{4}$  yards one-inch lace. Price 25 cents.



1622



882



817



839



816



Coach Williams came out of the principal's office about that time and hurried over to us. "What's the matter here, fellas?"

"Nothing," I said as quick as I got my breath.

"Some fellas can't walk civilized like the rest of us," Bull said sarcastically. "They have to push girls out of the way and knock their books all over the place."

"Tattle-tale," Pearl hissed.

My teeth nearly dropped out of my mouth. Bull's face turned the color of cooked beets. I felt like a fool. Defended by a girl! And Bull's girl at that!

"Come with me, Bull," Coach Williams said curtly. Then he looked at me. "Why in the Sam hill don't you come out for football, Jones?"

"The season's half over now," I said. "But I was figuring on coming out for track next spring."

An image of Mom's face flashed before me.

"Yeah?" Bull questioned, the sneer in his voice so thick you could cut it with a knife.

"Yeah," I said, making it sound definite.

"Well, see that you do," Coach Williams patted me on the back.

"Jimmy," Betty's voice brought me back to her.

"I would have hit him if it hadn't been for the coach," I blurted out.

"I don't think you would," Betty said with a toss of her head.

But she was all smiles when I went by her house that night to take her to the game with me. There was a rule that only press reporters could sit in the press box so she was going to sit with Sol and his girl. After the game, Sol had suggested that we go out to the Cove and dance.

I pranced up to the press box on air.



"You don't know how lucky you are, Mr. Hook, we have just one bed left."

The game with Brookfield was fast and furious. Our line was like a stone wall. Easy Billingsly, right tackle, played the best game he'd ever played. He was in on every tackle. I never saw a better functioning line.

I sat in the press box with my portable and wrote as if I were inspired.

Just knowing Betty was waiting for me was enough to make my head go round.

At the half Mr. Francis, the sports editor of the Daily Bulletin, our town's leading paper, read what I'd written.

"Boys," he said to the other reporters. "I'm taking it easy the rest of the game. That school reporter is writing it up like Bill Stern himself. I'm publishing his story."

I took a deep breath. I wondered what Betty would say if she saw my story in the town paper.

"Will you give me a by-line, Mr. Francis?" I asked, thinking, of course, that he was kidding.

"Absolutely," Mr. Francis said heartily.

Well, I outdid myself in the next half. Mr. Francis sat there smoking cigars and making wisecracks. I figured I'd arrived. The world was mine! I had the prettiest girl in town, and now I was getting my name in the city paper with a signed story. If Mom would just let me come out for track— If Bull Kennedy—

THE next day being Saturday and no school, I beat it to town and got the paper. Sure enough there was my article along with an old picture of me Mr. Francis had dug up out of the morgue. The picture had been made three years before when I won

the County humorous reading contest. It looked kind of sick, but not as sick as I was when, in the cold light of day, I read the story I'd written.

"Without that hard-fighting, hard-hitting bunch of fellows in the line, our backfield would have been stopped in their tracks. Easy Billingsly deserves a place on the all-conference eleven for his brilliant playing."

On and on I'd raved. I praised the line for its perfect co-ordination, its precision. I called attention to Dillard at center. I explained that there was never a bobble in his snapping the ball. The backfield, I'd said frankly, had to be good with a line like that. I'd passed over Bull's two touchdowns and extra points as if they didn't count.

When Bull read this!—

Monday morning when the school bus stopped, I saw Bull, Tom Stevens, and the rest of the backfield in one group . . . waiting. The linesmen were in another group . . . waiting. I didn't need three guesses as to who they were waiting for.

I could feel my heart hammering, but I stepped jauntily off the bus and walked a few steps. Bull came to meet me. The rest closed around us in a circle. It was a cool, brisk, fall morning, but I was sweating.

Bull spat contemptuously in the dirt. "Well, hotshot, you're some sports writer."

## She wears the cleanest clothes in town ... her mother swears by TIDE!

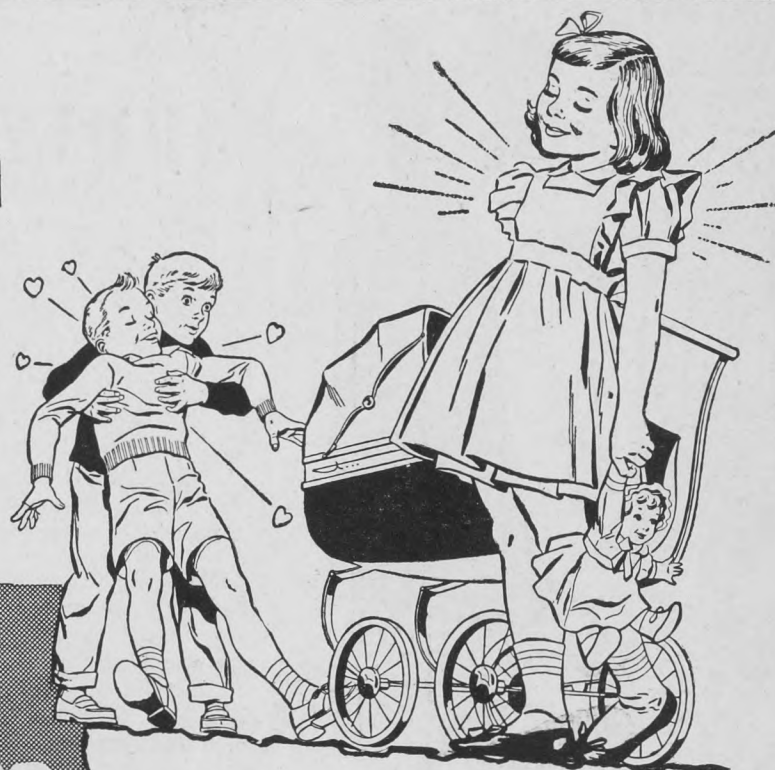
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"Thanks," I said. "Glad you appreciate me."

Easy and his friends laughed loudly. Out of the corner of my eye I saw Betty smile.

It burned Bull down.

"By gum," he yelled, "it takes more than a line to make a team. What about the backfield?"

"The line's been in there every game hitting 'em hard and heavy," I said loudly. "They've been opening up holes for you that a baby could walk through. So what? So I praise them for once the way they deserve, and you start howling."

"That's right," Easy spoke up. He didn't like Bull either.

"I'm not howling," Bull roared. "I just—"

"You just didn't get flattered clean out of kingdom come this once," I raised my voice higher than his.

Bull's face was purple. He doubled and undoubled his fist as if he could hardly keep from hitting me.

"It's poor sportsmanship——" I began.

"Don't you go telling me what's good sportsmanship and what's not," Bull shouted. "I'll break . . ."

"It's poor sportsmanship," I went on sarcastically, "to get all hot and bothered because somebody else gets praised once in a while."

Wham! Bull's fist landed on my jaw, and the next thing I knew Easy and a couple of other guys were pulling me to my feet.

"Well, Farmer Jones," Easy said, his eyes on mine, "you do talk and write big. That's something."

I was mad enough to swear, but what good would that have done? I looked around for Bull. He was gone. So were Betty and all the other girls but Pearl. She was standing on the steps.



"These fit me fine. Now do you have exactly the same thing in my size?"

"Hi," she said.

"Beautiful morning, isn't it?" I said.

"Jimmy," Pearl said softly, "I— Well, I've lost all my history notes and I'm scared to death of that exam. Would you—? Could I—?"

"You can use mine," I said handing her my notebook.

Funny, I had never noticed before what pretty eyes she had.

In English class Betty wrote me a note:

"I was thrilled to death with the article you wrote and the way you talked to Bull. But why didn't you hit him?"

Well, for gosh sakes! I groaned inwardly. I nearly tore up my notebook writing back.

"I'm going to beat the tar out of him someday, and I hope you're around to see it."

She sat there a long time. Finally, she wrote again—one word.

"Someday?"

What a winter!

BULL and his gang started calling me "Mamma's boy." Even the fellows in the line—Easy Billingsly included—passed me by sort of embarrassed. I was as popular as a rattlesnake. There was some talk of getting up a petition and having me thrown off the Tatler staff as editor, but nothing came of it.

But Betty. That's what got me. Wouldn't you think your girl would understand?

Bull and Pearl broke up, and Bull started hanging around Betty. I didn't think she would give him any encouragement at all.

One Saturday night, as usual, I walked up to the Myers' door. Betty opened the door all right, but she wouldn't look at me and she seemed mad all of a sudden.

"You didn't have a date with me tonight," she said, and she drew her lips down in a straight line.

"Why not?" I gasped, stunned. "I've been coming to see you every Saturday night since you moved here."

"I've got another date." She tossed her heavy mane of red hair, and her green eyes were like swords.

"Well, gee gosh," I said, "you knew that on Saturday night—"

"I don't care to discuss it further," she stormed. "And furthermore, I'll give you to understand that I can have a date with anybody I want to. Just because I've had a few dates with you is no sign that you own me."

"Well, ye gods!" I mumbled.

"Furthermore, I'll thank you not to swear in my presence."

"Okay," I groaned. "Only on Saturday night . . ."

"I've got a date in ten minutes," she said. "And I'll ask you to be gone in that time."

"Who with?" I asked miserably.

"I don't think it's any of your business in the least."

"All right!" I raged. "All right! It's Bull Kennedy. I know darn well you're going with Bull Kennedy. Well, I'd just like for you to know that it's perfectly all right with me. I don't care who you go with. There are plenty of girls in the world besides you. Plenty!"

I turned on my heel and started back down the walk.

"Jimmy," I heard her say, but I didn't stop.

At home I did my training: running in plowed ground, punching the bag, and eating good substantial food. After the pineapple-upside-down-cake episode, Mom quit cooking so many sweet things.

If there's anything that I can stuff myself but plenty on, it's pineapple upside-down cake. I was all set to dive in when Sol said, "Whoa, there, Jim. Do you want to gain back those few pounds you've lost?"

I groaned, "I'm starving."

Mom looked at me, and she looked at Sol. "Let the poor boy have something good to eat once in a while," she said.

"The poor boy," Sol said scornfully, "is still as big as a skinned mule."

"He is losing weight," Mom worried. "We don't want him to get sick."

"No," Sol said, "we want him to be a big fat sissy."

I pushed the pineapple upside-down cake away from me. Getting up from the table, I stormed, "I don't want any cake. Ye gods. You act like

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you're afraid I won't be anything but a skeleton."

After supper Mom came into my room where I was trying to keep my mind on English Lit.

"Baby—" she began.

I glared at her and she stopped.

"Jimmy, do they call you a sissy because you don't play football and things like that?"

She looked so worried my heart did a nose dive.

"Aw, Sol makes me sick," I griped.

"Jimmy," Mom said firmly. "I asked you a question."

"Look, Mom," I said. "I don't care what people say. I don't give a darn what Bull Kennedy or Betty or anybody says."

Mom twisted her apron strings. "I should have known," she said, and I thought she was going to cry. "I should—"

"Sol's crazy," I mumbled.

Mom looked at me a minute and straightened her shoulders. "Good-night, Jim," she said.

I gulped. She usually called me "Baby" or "Jimmy-boy." I thought about that for a while. I thought about Betty too. And about Pearl. Then I slammed my English Lit. against the wall. Women just didn't make sense.

My weight went down slowly, but I made it. I got some new jeans, tight fitting and snazzy sweater.

"Gee," Pearl said, "you look like a prize fighter."

Her eyes were big, blue, and admiring. Of course, a guy likes it, but sometimes he doesn't know what to say. I took her books out of her arms.

"Some hunk of man, huh?" I cracked.

"I adore curly hair and pretty brown eyes," she said.

"You do, huh?" was all I could think of.

Sweet girl, Pearl. I dated her for a couple of high school dances, but I just couldn't quit thinking about Betty.

It sort of got my goat the way Betty was going with Bull and not even speaking to me.

Finally, the track season rolled around.

**D**OWN in the locker room getting ready for track, Coach Williams handed me a pair of track shorts and a sweat suit. I got into the suit as excited as a kid the first day of school. I didn't have any trouble keeping my excitement to myself, though, for the other fellows steered as shy of me as if I'd had the plague.

On the field we took off our sweat suits and Coach Williams whistled.

"Hey, Jim," he said, "you ought to be a prize fighter."

I suppose that helped me in the hurdles some, for I knew if he and Pearl saw what muscles I had so

would Betty. We got set for the hurdles. Bull elbowed his way into the lane next to mine.

Boy, Sol was right! In light track shoes after all that running over plowed ground, I just floated along over those hurdles. I felt as light and airy as if I were sailing. I forgot Bull until I got to the end of the lane. Ye gods, I'd run off and left the others!

They came puffing up and Bull's face looked like a thunder cloud. I looked around, but, naturally, Betty wasn't anywhere in sight. Pearl was. I waved at her.

Coach Williams was coming along behind, his eyes bulging out on stems.

"Hey, there," he gasped. "You ran that like a veteran. You didn't even look like you were putting out!"

"Well, Sol gave me a few pointers," I said.

He kept staring and looking at his watch as if he didn't believe what he'd seen.

"Get ready for the high hurdles," he snapped.

Going back down the field, Easy trotted along beside me.

"You know, Jim," he said. "I never did thank you for that nice write-up about the Brookfield game. It was pretty good."

"Forget it," I said. "I meant it."

I had a lot of fun at track practice. I felt more like one of the fellows than I ever had. They were swell. All except Bull. I beat him again in the

high hurdles and the 100-yard dash, but he made me look sick in broad jumping and pole vaulting. He was a good athlete, all right. He had form and precision. The way he handled the shot-put was a joy to behold. I figured he'd be hard to handle in a fight.

I laughed and joked with the others, took my shower, and dressed to go home. Sol had promised to pick me up after track practice.

Bull was standing by the door of the locker room as I started out. He started out the door at the same time, and we bumped each other hard.

"Look where you're going," he said angrily. "Who do you think you're trying to shove around?"

"Well, well, little Bull of the woods," I said. "I'll swear I didn't see you."

"You'll see me the next time," Bull snorted and slapped me across the face.

"Look, fella." I stepped back. "I've had enough out of you."

"It's not all you're going to get if—" he began.

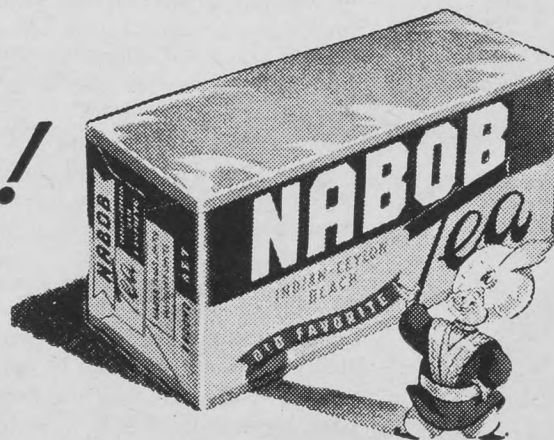
"Come over to that vacant lot around the corner," I said, "and I'll show you a thing or two."

It was quiet and still in the locker room. A couple of pairs of boxing gloves landed at our feet and Coach Williams walked up.

"You boys have had a grudge against each other for a long time.



*Refreshing as spring!*





sent to Helena, the Montana capital, to take evidence, and if possible, to bring back prisoners. They started south from Macleod on March 15, 1875, but ran into a blizzard followed by a drop in temperature to 65 degrees below zero. They took refuge in a snowbank. Their horses died. The constable, afterward Sir Reginald Denny, became snow blind and had to be left at an American army post.

The arrival of the Mounties at Helena created quite a furore, but they had to come back without prisoners. The extradition agreement between Great Britain and the U.S. was the least satisfactory one the British had with any country. Moreover the Canadian police did not prove to the satisfaction of the Americans that the massacre had occurred on the Canadian side of the border which at the time of the crime was not completely surveyed. The Canadians made contact with a number of men who acknowledged being at the massacre, but they all swore that the Indians outnumbered the whites, that fire was first opened by the Indians and that the whites had only fired in self-defense.

After the departure of the Canadian police, the Americans picked up a number of suspects and went through a form of inquiry, at the end of which all hands were released on the ground of insufficient evidence.

IN some manner, on which the police records are silent, three of the alleged participants were picked up and escorted overland to Winnipeg for trial in June 1876. It had taken \$14,000 to apprehend one of them and bring him to trial at a time when the pay of a police constable was 75c a day.

## Lumbering Co-operatively

*The spirit of Rochdale in action on the frontier*

by J. T. EWING

WHEN a lumber mill at Love, Saskatchewan, was for sale in the fall of 1948 the men who had worked for the owner formed a co-operative and bought it. They named it the Love Wood Products Co-operative Limited. It has been highly successful and is an excellent example of employees taking over a business and operating it efficiently as a production co-operative.

There are 17 members of the co-op which is organized on a share-capital basis. Going wages are paid to all employees. At the end of the year patronage dividends are paid to both member and non-member workers in proportion to the time they worked for the co-operative during the year. Members get preference for available jobs when there is not enough work to keep a full crew busy.

Before patronage dividends are calculated all expenses have to be deducted. These include administrative expenses, fuel used in the power plant, depreciation and interest on members' equity.

The mill is situated on the outskirts of the village of Love. According to the secretary-manager, W. G. Sears, having it there, rather than in the bush nearer to the timber, permits salvaging edgings, slabs and pulpwood which would otherwise be wasted. Sale of these by-products

The trial before the Court of Queen's Bench lasted for three days. Besides the three men at the bar, James Hughes, George M. Bell, and Philander Vogle, 11 others were tried in absentia. The chief government witnesses were Abel Farwell and Big Mary. None of the people in Montana who seemed to be well informed about it could be induced to come to Canada to give evidence before the court without pledges of immunity from arrest under bench warrants, and safe conduct guarantees back to Fort Benton, which the Canadian authorities would not give. The accused present took the stand and swore perfect alibis, each for himself and for the other two, even though they were all personally known to Farwell before the massacre, and identified by him as being engaged in it. Hon. James MacKay, a local politician, formerly in Louis Riel's provisional government, and subsequently in the legal government which succeeded it, provided character evidence which did the prosecution no good. He testified that the Assiniboine Indian was by nature quarrelsome and treacherous. No one seems to have thought of asking any of the survivors to testify.

The court threw the case out on the ground of insufficient and conflicting evidence. Whatever the facts may be, the news of the Winnipeg acquittal was the signal for public rejoicing in Helena.

Of all the countless deeds of perfidy done by the white savages against the red men in western Canada, the Cypress Hills massacre was the worst. But public opinion was aroused. It was the last outrage on the grand scale, thanks to the energy and devotion of the North-west Mounted Police

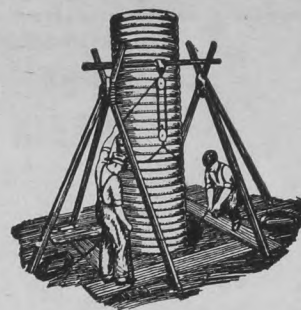
helps to pay the cost of hauling the logs.

A timber berth has been secured from the Saskatchewan timber board each winter and the sawn lumber is sold to the timber board. The logs are hauled to the mill in tree lengths where they can be easily cut into saw logs. The tops are cut into pulpwood.

Three-ton trucks haul logs which will yield up to 5,000 feet of lumber per load. The average load is over 3,000 feet. A very sturdily built sleigh is used as a trailer instead of wheels as it is more satisfactory when snow is on the ground. At the loading point one rear wheel of the truck is jacked up and the truck motor supplies power to the jammer to load the logs.

Capacity of the mill is from 20,000 to 40,000 feet per day, about 3,000 feet per hour. In February, 28 men were employed at day wages besides the haulers and bush workers. In all about 40 men were engaged in supplying timber and sawing lumber.

There is one other lumber mill co-operative in the province. It was organized with about 25 members at Cumberland House last fall and has been operating throughout the winter on much the same basis as the one at Love. The members are Indians and Metis from Cumberland House and during the winter they took out and sawed about 300,000 board feet of lumber.



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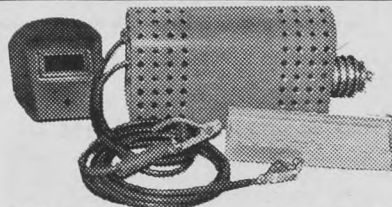
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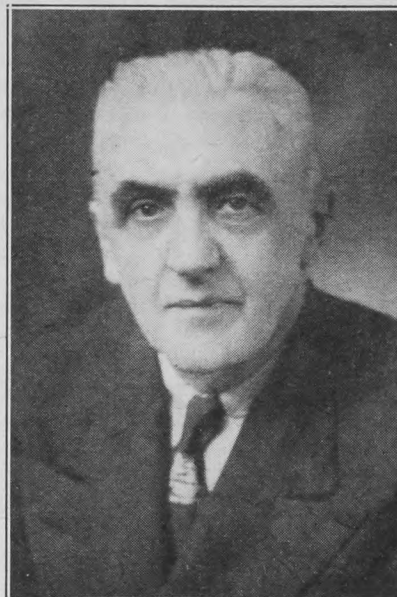
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## H. S. Fry Heads A.I.C.

The Agricultural Institute of Canada announces a new slate of officers to take over the running of its affairs



Harold S. Fry, A.I.C. president elect.

**H**AROLD S. FRY, a senior editor of The Country Guide, has been elected president of the Agricultural Institute of Canada for the year 1951-52. He has been actively associated with this organization for a number of years, and has held several offices in it. He is a past president of the Winnipeg Branch, and for two years was a member of the A.I.C. national council. He is currently president of the Manitoba Institute of Agrologists.

Mr. Fry's interests are concentrated in the fields of agriculture and education. He has been active in the western section of the Canadian Society of Animal Production, and is a past president of that body; he is one of the founders of the Western Canadian Society of Horticulture, a director of the Manitoba Horticultural Association and a member of the executive of the Manitoba Agronomists Conference.

In 1950 he acted as chairman of the Manitoba General Committee on Education Week. In 1945 he was appointed to the Board of Governors of the University of Manitoba, and is now serving as chairman of the agricultural committee of that body.

Mr. Fry graduated from the University of Toronto in 1914, with specialization in horticulture. For three years he lectured in horticulture at the Ontario Agricultural College, leaving there to join the editorial staff of the Canadian Countryman, Toronto. Following this he spent ten years on the

editorial staff of The Farmer's Advocate. Most of this period was spent in London, Ontario, though for a year and a half he was in Winnipeg, where he acted as editor of the western edition of The Farmer's Advocate. Following this he served for five years as Director of Publicity for the Saskatchewan Wheat Pool. He joined the editorial staff of The Country Guide in 1941.

Institute members elected four new directors to serve a two-year term. The Maritime Provinces will be represented by George R. Smith, Truro, Nova Scotia. Mr. Smith is Director of Chemistry, Soils and Fertilizer Services, Nova Scotia Department of Agriculture and Marketing. Dr. R. H. Common, head, Department of Chemistry, Macdonald College, is the new Quebec director; and W. H. Waddell, Field Husbandry Department, Ontario Agricultural College, Guelph, Ontario, will represent western Ontario.

Walter S. Frazer, Assistant Director, Extension Service, Manitoba Department of Agriculture, has been elected to represent Manitoba. Mr. Frazer is a past president of the Winnipeg Branch of the A.I.C., and is active in the Manitoba Institute of Agrologists. He graduated in agriculture from the University of Manitoba in 1933 and served as an agricultural representative for seven years before being moved to the Winnipeg office of the Extension Service.

The Agricultural Institute of Canada, which Mr. Fry will head for the next year, is an organization of approximately 3,400 professional agriculturists engaged in research, teaching, extension and administration in the field of agriculture. It has 24 local branches in Canada, and one in Britain. Branch meetings are held frequently, and are primarily concerned with the study of problems related to agriculture. In the national sphere the Institute has done valuable work in the co-ordination of agricultural services, in the completion of special agricultural projects and studies, and in guidance given to agricultural leaders at branch and annual meetings. Added to this they have collected and administered funds for the granting of scholarships for the post-graduate training of agricultural scientists. Over 60 scholarships, worth \$800 each, have been awarded in the last few years.

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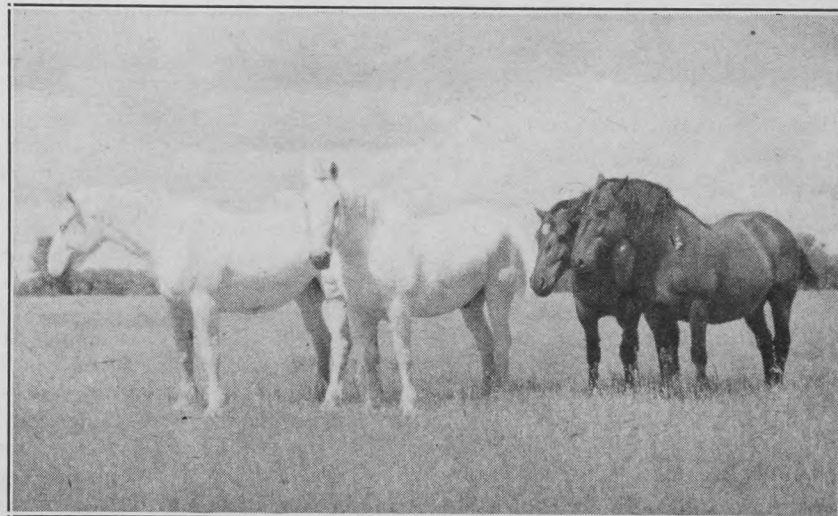
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While tractors work in the fields, horses take their ease in the pasture.



# The Country Boy and Girl



A FLASH of orange and black flits through the air—our handsome Baltimore Oriole flashes past with a piece of white twine streaming out behind her. She has found just what she needs to begin her nest. A dainty hammock nest it will be, swinging freely at the far end of a limber branch where cats cannot reach it.

Now she throws a loop of her cord around the little forked branch by flipping one end over, then bringing the loop around. Then off she goes to search for more white cord. She lets all ends hang down but later she will loop them over to make the rim of the nest strong and secure. Now she is off to gather horsehair and grey strips of bark to weave into her nest until it looks like a little felt basket about five inches deep. But this dainty little basket nest is very strong and you would find it difficult

to pull it apart. Orioles' nests may hang in trees for four or five years but the oriole will build a new nest each year. A soft lining of feathers and down is added and her nest is ready to receive four or five creamy white eggs with pen lines of black, brown and lilac.

Orioles will build around your home if you put string and yarn on the bushes for them to use in building their nests. They use only white or grey strings because they want their nests to be hidden. Just for fun, put out a few brightly colored yarns too. Perhaps the oriole might weave one into her nest.

*Ann Sankey*

## Welcome

"Good morning, good morning!"

The children all sing,

"What's in your basket  
Today, Miss Spring?"

"Little blue bonnets  
For violet heads,  
Dandelion caps  
For the buds in their beds—

Tiny blue eggs  
For the robin's nest,  
A soft gentle breeze  
Blowing out of the west—

Lovely perfume  
To scent up the air,  
The promise of new life  
For you everywhere!"

"Oh, empty your basket,  
Dear dar'ing Miss Spring!  
We hardly can wait  
To see everything!"

—Audrey McKim

## Kitty's Magic Adventure

I HAVE known a great many little grey kittens in my day, but only one who had a magic adventure. That one, Kitty by name, went sailing off on the high seas, on the broad back of a magic whale.

It all happened like this. Julie, a little girl who lived in a little white cottage near the seashore, had a good and old friend named Captain Salt. That merry gentleman came home from China across the bounding main, and brought the little grey kitten to Julie, as a gift.

"Shiver me timbers and blow me down, Julie," said Captain Salt, "this cat's a sailor if I ever met up with one. He was born on my ship, and he learned to climb the ropes without any help at all. He'd find the highest spot on the ship and sun himself there. He is a bit lazy though, and that's not like a sailor. But he likes the sea."

Julie was delighted with the kitten, and said "I suppose he can swim like a fish, too, eh Captain Salt?"

"No, no," said the Captain, shaking his great grey head, "I never have seen a cat who was fond of swimming, but

he likes the sea air. When you go swimming Julie, take him along, and set him on the raft out there. He'd enjoy that."

"Thank you, sir," said the little girl, "Thank you for my cat. Captain Salt, do you suppose that he can tell me stories about his life at sea? I like stories."

"Well now," said the old man, "I've never heard him telling any stories, but if it's stories you want, I've hundreds of them. How would you like to hear the story of the magic whale I once met up with in the China Sea?"

"Oh I'd love to hear it," said Julie settling herself at the old man's feet. And he began to spin his yarn of the sea. He told of this great and magic whale, who could talk like a man, who could travel with the speed of a rocket, and who left his home in the China Seas once each year to explore the world.

"Why I've known that fellow to swim into harbors as small as our own here, to sun himself," said Captain Salt. "Oh yes, he's a strange whale, if I ever saw one."

Julie begged for more stories, but the old man laughed merrily and told her to be off with her kitten, because he had work to do.

Julie took her kitten to the raft. He promptly closed his green eyes and went happily to sleep to dream his kitten dreams. For many days after that, Kitty slept on the raft, while Julie played about in the water.

One morning, when they went down to the sea, the raft was gone. The boys who had built it had taken it off for a cruise along the shore line.

"Oh Kitty," said Julie, "the raft is gone. Now where are you going to sleep?" And then her eyes caught something grey and flat and big, that lay south of the wharf. She looked puzzled, and then she laughed. "It's not a raft, Kitty, but it's big and flat and grey like a raft. I'll set you on it."

She did, and then swam off to enjoy herself. When she returned, a half hour later, the big flat and grey thing

was gone. So was Kitty. Julie cried out in alarm, and swam quickly to the shore, and ran more quickly to the cottage of old Captain Salt. Her story tumbled out. Captain Salt scratched his old grey head, and then snapped his fingers. "Well shiver me timbers and blow me down!" he said, "It could be! Yes, it could be!"

"Could be what?" asked the little girl.

"Could be the magic whale. It's just about time he was off on one of his trips." The captain reached for a small strange looking model ship that stood on a shelf nearby.

"This is a junk, Julie," he said. "A Chinese junk. You get into it, and sail due east. You'll be able to catch that whale if you follow my sailing orders."

Julie laughed half-heartedly. "But Captain Salt," she said, "you must be dreaming. I couldn't get into that little boat."

The captain laughed whole-heartedly. "You can if you use the Chinese magic that I will give you. Say these words, and you'll see what you shall see."

And he gave Julie the words,

"Oma padma Ling hee lo

Across the magic sea I'd go

To catch my kitten on the whale

La he . . . ling ho . . . let us sail."

Julie followed her sailing orders to the letter, and the junk grew in size. Julie boarded her, and off she sailed toward the east, with the speed of a bird. It was not long before she heard a soft "Mieow . . . mieow."

"It's Kitty," she gasped, and she called out, "I'm coming Kitty, I'm coming." In a few minutes she was face to face with the whale. She smiled at him. "Hello," she said. "You carried my kitten away. Captain Salt lent me his magic junk to catch up with you. May I please climb up on your back and get my little cat?"

"Of course, of course," boomed the whale. "I didn't even know he was on my back. I'm very sorry I carried him away."

"Oh that's all right," said Julie. "I know you didn't mean to do it. And I'm very glad to meet a friend of Captain Salt."

"I'm glad to meet you, too," said the magic whale. "Give my best wishes

to the captain when you see him again."

Julie promised that she would do that, and the whale then with a mighty dive, disappeared from sight. So great was the splash that he made, that the junk slipped right back to Julie's wharf on its backwash. Julie laughs every time she thinks of her kitten's adventure.

## Sunshine and Shadows

No. IX of a Series

by Clarence Tilenius

DID you ever stand among a herd of horses on a bright sunshiny day and notice the sharp division between the parts on which the light falls and parts in shadow? On a white horse this shows particularly well, and since there is no color to confuse you, a white horse is an excellent one to draw. It is not the color or the shading that makes the drawn animal look solid, it is the care with which you have drawn the boundaries of the shadows.

Look carefully at the sketches A, B, C. Notice that the shadows are almost flat, like a poster. In bright sunshine, it is very easy to see exactly where the light leaves off and the shadow begins. When you have blocked in the outline of the animal, sketch quickly the pattern of shadow and cover it with a flat tone. If you have seen the divisions of light and shade correctly, you should have a very convincing drawing.

In these drawings, you must look always for the areas of shadow—disregard everything else—and do not clutter up the drawing with little details. The sketch A indicates what to look for.

While you are at it, it is a good idea to notice the shape of the cast shadow on the ground beneath the animal. The shape of this alters with the position of the sun and the time of day, so that if you are painting a picture of, say, horses grazing in the afternoon, their shadows on the ground would help show the time of day. You will not in a quick sketch have time to draw them carefully, but it is a good idea to make some indication on your sketch where these cast shadows come. See B and C.



NOTE HOW THE SHAPES OF THE SHADOWS GIVE THE FORM. NOTICE ALSO THE CAST SHADOWS ON GROUND.





# THE *Country* GUIDE

with which is incorporated

THE NOR'-WEST FARMER and FARM and HOME  
Serving the farmers of Western Canada Since 1882

VOL. LXX WINNIPEG, MAY, 1951 No. 5

## The Cost-of-Living Debate

Elsewhere in this issue our Ottawa correspondent reports on the cost-of-living debate in the House in a summary with which we are in complete agreement from the beginning to the end of the first sentence. Certainly the government is in no mood to impose controls, but we believe that the reasons on which that decision rests require a more sober analysis.

The minister of finance has said quite accurately that there are two main issues facing the Canadian people; the promotion of peace and the control of inflation. The second is as important as the first. If the citizens of this country, who must provide the funds to support our nascent rearmament, suffer from inflation beyond a certain point, the nation's preparations to meet aggression will be hamstrung. Communist writers have repeatedly declared that the surest way to destroy a capitalist economy is to destroy its currency through inflation. If the western nations are unwilling or unable to reverse the inflationary process that is overtaking them, the Russians will have won the first battle without striking a blow.

The March index of the Bureau of Statistics placed the cost of living at 181.8, the highest on record. Consequently the dollar is worth less than 55 cents today in terms of the 100-cent dollar of 1935-39. We believe it is irresponsible journalism to contribute to the vain hope that having reached what will prove to be a peak, the country will soon begin to experience a decline as a result of measures which have been enacted. There is nothing in the April debates in parliament to warrant such a view. The budget brought down April 10 adds fuel to the flames. The increase in the sales tax and the increase in the corporation tax will be passed on to the consumer with pyramiding effect. Insofar as the personal income tax touches organized labor it will lead to new demands for wage increases to enable the worker to enjoy at least the same take-home pay, and this at a later day will be transposed into higher prices. Inflation up to now has been largely psychological. Prices have been rising in anticipation of shortages and still higher prices. Only when defence industries begin working actively will the full inflationary effect of rearmament show itself. It takes no great courage to predict a sharper rise in the cost-of-living index in the next two months than any that has been experienced to date.

The only new deflationary device contained in the budget, deferred capital cost allowance, is good as far as it goes, but it only skirts the fringe of the problem. The government pins its hopes on higher taxation and on measures which have already shown their ineffectiveness as they have been in force throughout the recent period of rapid rise. It exhorts private individuals to curtail spending but fails to set an example. The total non-military government expenditure in 1945 was \$1,062 millions. In five postwar years it has nearly doubled, as it will reach \$2,036 millions in 1951. The best the government has been able to do is to reduce its estimates \$35 millions.

Raising the old bogey about the cost of administering controls is merely reviving a straw man which was beaten into the ground by Hon. J. L. Ilsley, the minister responsible for controls during the war, when he declared that for every dollar which controls cost to administer, the consumer saved between \$12 and \$13. Also the hoary delusion that higher incomes offset high prices and leave us all better off, has been shattered. While that may be true for a few classes of people it is emphatically not true of Canadians as a whole. Figures submitted in the House debates show that over a period of six years there has been a decline of nearly 16 per cent in the

purchasing power of the average Canadian income, even though that income is expressed in a larger number of dollars.

To discuss a roll back of prices in terms of wheat is to flail the air. No domestic roll back is going to affect wheat. Export prices since August 1, 1948, have been fixed by the International Wheat Agreement. Even if the price were not so fixed, a roll back of over two years is thoroughly impracticable and would never be attempted. The difficulties of the American price control organization with 30 to 60-day roll backs ought to be enough to clinch the argument.

An observer cannot escape the conviction that the government will not impose controls until the public becomes thoroughly aroused about it, and until all sections surrender the hope that exceptions will be made in their favor. American controls have creaked badly because large sections of the economy are resolved that though others may be penalized, they must not be. The Canadian government doubtless feels that only when this hurdle is cleared by their own people will they be warranted in imposing and enforcing the annoyances inseparable from effective controls to check inflation. Reasonable people will support them in that course.

## Do Farmers Get the Gravy?

Urban readers are having it well drilled into them that food prices are chiefly responsible for the advance in living costs. The food price index for February stood at 224.4 when the general cost-of-living index was 175.2. From this it is assumed that the farmer is the chief beneficiary of advancing prices.

That idea is even more firmly entrenched in the United States, and is more plausible because in that country many farm products enjoy parity price support. But even there it is not true. Senator Maybank has pointed out that when American wheat was selling for \$2.81 a bushel, a pound loaf of bread sold for 13.8 cents. Then the price paid to the farmer went down until in October it brought only \$1.91 on the farm, while the price of the same loaf climbed to 14.7 cents, the result of processors' and not producers' boosts.

A. G. Mezerik, an industrial consultant writing in the New Republic, states that in the United States increased mark-ups are being taken at an unprecedented rate at every stage between the farmer and consumer. Price control has proved to be a bonanza for the big corporations which process and handle food after it leaves the farm. The National City Bank of New York has just released its report on net income for leading corporations in 1950. American meat packers increased their profits 63 per cent over the previous year; sugar processors upped their profits 35 per cent, and the corporations which process other foods increased their profits by an average of 14 per cent.

While all this was taking place net farm income declined steadily from \$18 billion in 1947 to \$13 billion in 1950, a drop of 27 per cent. During the same three years corporate profits rose from \$18.5 billion to \$24.5 billion.

The U.S. department of agriculture discloses that the cost of bringing a pound of beef from the farm to the retail counter is now nearly four times as high as it was in 1945, the margin having increased from six to 22.5 cents per pound in five years. The Big Four packers are stated to have earned net profits of \$43 million in 1950 as against \$26 million in 1949.

Secretary Brannan released some figures which may help city people to understand what is happening to price relationships. Milk doubles in price within a few hours after it leaves the farm. For the corn inside a 19-cent can the farmer gets 2½ cents. His share of a can of 16-cent tomatoes is three cents. Onions which cost the consumer six cents a pound left the farm at a cent a pound. The same kind of thing applies to clothing. The cotton in a shirt costing from \$3.50 to \$4.00 brought the farmer 30 cents. The wheat in a 15-cent loaf has enriched the man who produced it by 2½ cents.

Armed with this information American farm leaders are making some very caustic comments. Statistical analyses of this nature are not available

in Canada, but The Guide would recommend it as a good exercise for the large numbers of technical people, capable of doing this kind of work, now on the payroll at Ottawa. In Canada, we learn from the budget, corporation profits jumped 19.7 per cent after taxes in one year. It would be nice to know how many more of Mr. Mezerik's comparisons are applicable here.

## Spotlight on Gambling

Two investigations into gambling were completed almost simultaneously in April, one in the United States and the other in Great Britain, which illuminate some of the differences in political method and outlook in those two countries.

In the United States the Kefauver committee wound up a ten-month investigation amid the blare of loudspeakers and the hot glare of klieg lights. Millions of citizens watched its underworld witnesses pass on the screens of their television sets. In a road show covering a dozen major cities it caused an extraordinary stir. It exposed scandals and set off local prosecutions like a string of firecrackers. It demonstrated that the mobsters who once flourished under prohibition have shifted their main activity to organized betting rings. The gamblers pay millions to the police for protection. Their influence reaches mayors of the large cities and governors of some states.

By comparison, the Royal Commission on gambling which reported to Westminster spoke in quiet, but nonetheless effective tones. Perhaps two out of three people in Britain will put a shilling on a horse without moral qualms, but the total amount bet in a year, estimated at £70 million is much less than what was believed to be the case. The Commission believes that betting like any other indulgence, drinking for instance, should be controlled by the state, but that it does not necessarily involve moral turpitude. It recommends the opening of shops where cash bets can be laid, carrying out the parallel of the control of drinking by the licensing of pubs. The commission argues that it is better to keep the addicts who exist out in the open than to conceal them in alleys and dark corners.

We recommend the study of these two reports to Hon. Harold Connolly, minister of trade and industry in the Nova Scotia government, who is reported as telling a New York audience that Canada would become incorporated in the American union within 25 years. It will give him some insight into the political tradition he plans to leave and the one ahead of him.

## Voice from Brazil

The International Association of Broadcasters held a convention at Sao Paulo, Brazil, recently, in the course of which it passed a resolution condemning the CBC as undemocratic, and calling on the people of Canada, through their elected representatives, to scrap it and replace it with a system which will "establish freedom of expression in broadcasting as a juridical right."

Canadians may very well ask what was the composition of this body which presumes to lecture them on democracy, who persuaded it to do so, and what opportunity it had to hear the other side of the argument? Rightly or wrongly we in this country believe that our concepts of democracy are as good as any likely to find expression in South America, and we wonder if the shot aimed at our national broadcasting system might not have been directed elsewhere with greater justice. With Saturday Night, we would like to know how many nations whose representatives joined in this exhortation to Canada "to establish freedom of expression as a juridical right" have done so themselves?

Behind this verbiage we suspect the activities of some private broadcasters who simply wish to be free of restraints to exploit radio for themselves, a situation which we would consider less democratic than the present control through CBC, an agency that can be reached through the elected representatives of the people. The CBC is the child of our democratic parliament. It has been endorsed by a succession of governments. We doubt if it will be shaken by this backstairs approach any more than it has by the frontal attacks it has been able to sustain.



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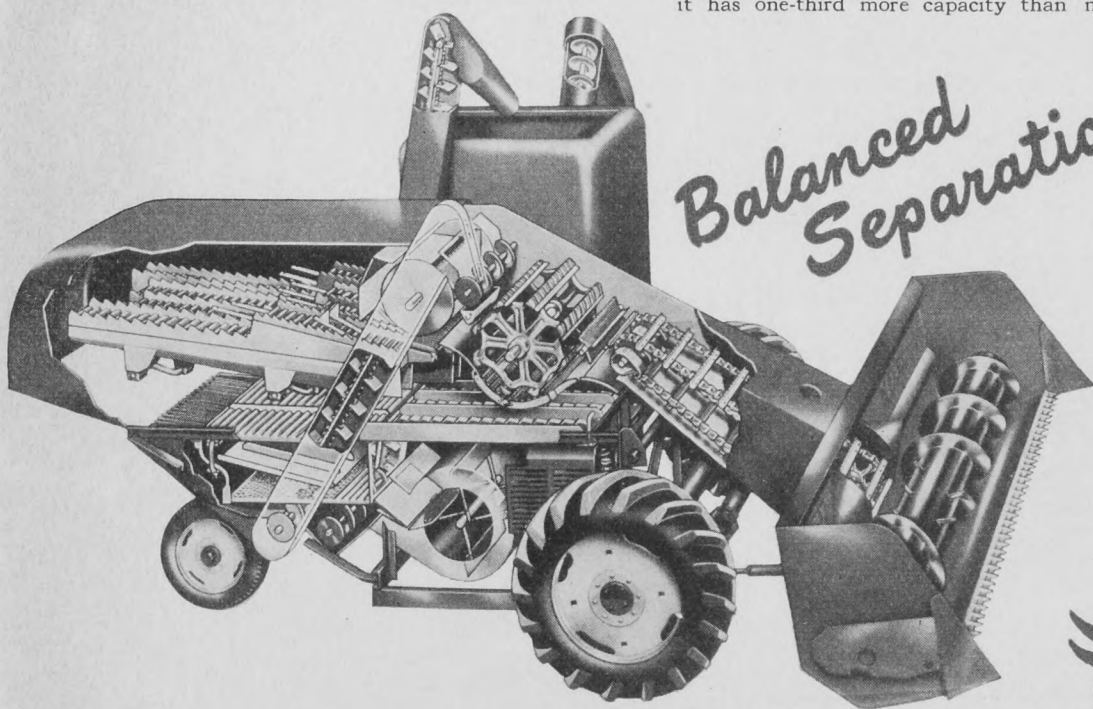
"I used one of your No. 21 Combines for 3 years, cutting around 3,000 acres with it. This fall (1950) I bought a No. 27, and believe that under my conditions it has one-third more capacity than my No. 21."

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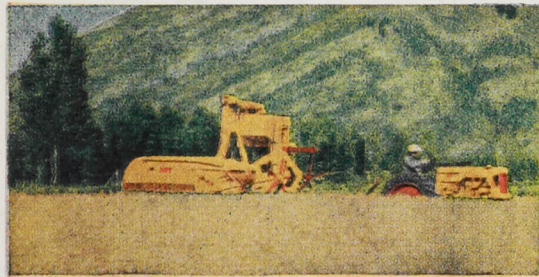
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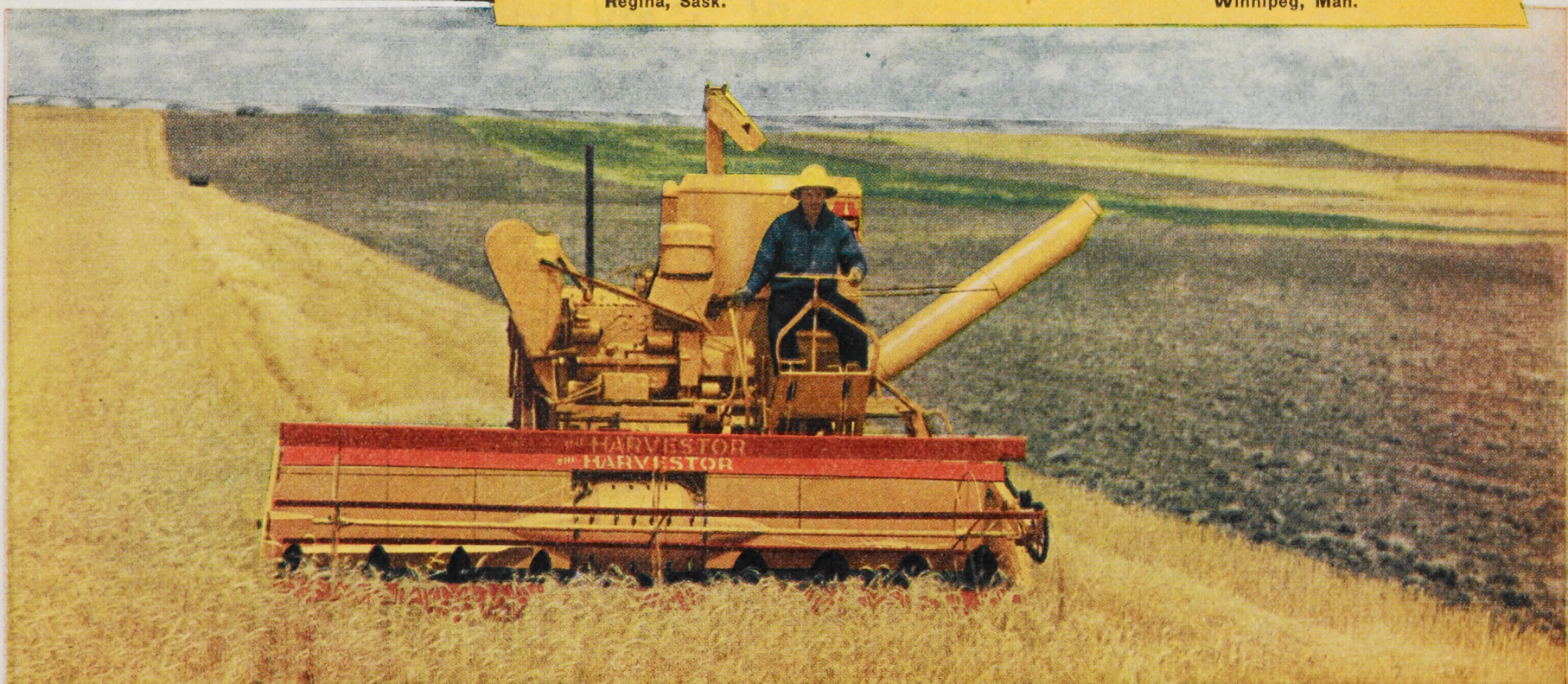


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